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ABSTRACT

A case study investigated three specific concerns related to the shortage of nurses and the decline in enrollment in nursing programs: (1) identification of reasons for the nursing shortage and enrollment decline; (2) identification of weaknesses in nursing that have contributed to the shortage of nurses and enrollment decline; and (3) identification of strengths in the nursing profession that could attract people to nursing. Data were collected through an extensive literature review; interviews with nurse leaders, nurse educators, and practicing nurses in Maricopa County, Arizona; and mailed questionnaires to two random samples of 700 registered nurses who work in Arizona. Nurses identified several major issues as causes for the nursing shortage and enrollment decline in nursing programs. The issue that was repeated most frequently related to the lack of adequate financial compensation. Many respondents also believed that nursing has a poor image because of poor general working conditions and the way the media depict nursing. Recommendations based on the findings of the study included more nurse and nurse-educator representation on committees that have an impact on nursing salaries, more networking among nurses, assertiveness training for nursing students, and increased public relations and recruiting efforts for the nursing profession in general and for the Phoenix College nursing program in particular. (44 references.) (KC)

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# NURSES' PERCEPTIONS ON THE SHORTAGE OF NURSES AND ENROLLMENT DECLINE IN NURSING PROGRAMS AND MEANS TO INCREASE STUDENT NURSE ENROLLMENT IN ARIZONA

by

A. Louise Jones

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A Major Applied Research Project presented in partial fulfillment of the requirements for the degree of Doctor of Education

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Abstract of a Major Applied Research Project Presented
to Nova University in Partial Fulfillment of the
Requirements for the Degree
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# NURSES' PERCEPTIONS ON THE SHORTAGE OF NURSES AND ENROLLMENT DECLINE IN NURSING PROGRAMS AND MEANS TO INCREASE STUDENT NURSING ENROLLMENT IN ARIZONA

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The growing concern regarding the shortage of nurses and the decline in enrollment in nursing programs being expressed by nurse leaders, practicing nurses, other health professionals and the public at large is a signal for the nursing profession to pause and take a considered look at its strengths and weaknesses.

The purpose of this case study was to investigate three specific concerns related to the shortage of nurses and decline in enrollment in nursing programs: (1) identification of reasons for the nursing shortage and enrollment decline, (2) identification of weaknesses in nursing which have contributed to the shortage of nurses and enrollment decline, and (3) identification of strengths in the nursing profession that could attract people to nursing.

Based on the data obtained from Arizona nurses on their perceptions relating to the nursing shortage and enrollment decline, strategies were identified to attract qualified students into nursing programs and keep practicing nurses in the profession.

In this case study there were several processes used for the collection of data. The first process consisted of an intensive literature review on the shortage of nurses and decline in enrollment in nursing programs. Then interviews were conducted with nurse leaders, nurse educators, and practicing nurses in Maricopa County (Arizona). Next, two different questionnaires were sent to two separate random samples of 700 registered nurses who work in Arizona. The interviews and the first questionnaire focused on the cause of the nursing shortage and decline in enrollment in nursing programs, weaknesses in the profession contributing to this manpower shortage, and strengths which might attract people to the profession. Based on information gained from content analysis of the first questionnaire, a second questionnaire was developed to determine Arizona nurses' perceptions on strategies needed to attract qualified students into nursing programs and to keep practicing nurses in the profession.

The findings from the interviews and first survey were consistent with what many leaders in the health field had postulated as reasons for the shortage. There were several major issues that the nurses identified as causes for the nursing shortage and enrollment decline in nursing

programs. The issue that was repeated most frequently related to the lack of adequate financial compensation. This issue was also considered a weakness in the nursing profession and the reason women are choosing other careers instead of nursing. Respondents believed that nursing salaries should be increased.

Many respondents also believed that nursing has a poor image due to poor general working conditions and the way the media depicts nursing. Strategies given by respondents to counter this negative image were to develop a marketing approach to recruit, promote, and sell nursing as a viable career choice.

Based on the findings of the study, the following actions were recommended: (1) nursing faculty members should serve on committees and task forces to impact decisions that affect nurses' salaries, (2) nursing faculty members should keep abreast of political issues that impact nurses and, as issues come up, network with other nurses to affect decisions regarding nursing concerns, (3) the Phoenix College Nursing program should investigate and implement innovative marketing strategies for student recruitment, (4) nursing faculty should attend career days in high schools to represent nursing, (5) nursing students should be encouraged to take courses in leadership, management, and assertiveness training skills, (6) the Phoenix College nursing program should investigate areas of nursing interest in continuing education to develop and conduct continuing

education courses according to local need, and (7) a panel of nurse leaders and educators from the community colleges and universities should be established to lobby television and other media sources to portray nursing in a more positive manner.

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# Chapter 1

## INTRODUCTION

Presently there is a national shortage of nurses and a decline of enrollment in nursing educational programs. According to many nurse leaders and others who have felt the impact of the current shortage, this situation has reached crisis proportions (Richman, 1987; Clark, 1987). With the present critical shortage of registered nurses and the anticipation of an even greater shortage in the future, hospitals, nursing organizations, colleges and universities are under enormous pressure to attract new people into the nursing profession (Reed, 1987).

The nursing department at Phoenix College sees the importance of investigating the reasons for the nursing shortage and decline in student enrollments and identifying strategies that can be developed to attract qualified candidates into nursing and keep them in the profession.

### Statement of the Problem

"Awareness of a nursing shortage has largely come about by the dissemination of many articles about shortage problems in individual hospitals" (Johnson and Vaughn, 1982:498). "In 1980 the American Hospital Association (AHA) reported that there were 100,000 budgeted vacancies for registered nurses in hospitals alone" (Williams, 1982:40).

The following year some hospitals were reporting large shortages of nurses with some hospital closures while other hospitals were reporting no shortages. Therefore, in the early 1980s the American Academy of Nursing and other nursing organizations began studying the perceived shortage of nurses.

> Several councils and commissions were created in the early 1980s to address the phenomena and to determine whether or not a nurse shortage existed. The unanimous conclusion was that a shortage of skill levels rather than numbers existed (Cohen, 1986:23).

By 1986 the nursing shortage was again in the news. The American Hospital Association reported that the vacancy rates for RNs in hospitals had doubled from 1985 to 1986 and there was a 13.6 percent RN vacancy rate in acute care institutions across the country (Selby, 1987; Gioiella, 1987).

Also in 1986, the American Nurses' Association's president, Margretta Styles, stated that the 1986 shortage was characterized by an unprecedented demand for services at a time when overall enrollments in nursing programs were dropping. Styles made the statement that, in the two prior years, it was heard: "Too many nurses! Too few jobs!" According to Styles, in 1984 the message was sent out that there was an oversupply of nurses and that may have resulted in students not wanting to enter the nursing profession. It is Styles' belief that this added to the seriousness of the problem (Styles, 1986).

Due to the severe impact of this most recent nursing shortage on the nation's health care, a number of studies have been done on the degree and the severity of the shortages. However, only one study was found in the literature that looked at possible causes for the nursing shortage and reasons for the decline in student enrollment in nursing programs. The majority of information in the literature regarding the nursing shortage consists of individual views and opinions held by leaders in nursing and related health fields, without documented research findings to support their views.

The one study conducted by the Division of Nursing of AHA that did look at possible reasons for the nursing shortage collected data through focus group interviews from twenty-nine selected nurse leaders, practicing nurses and student nurses (Miller, 1987).

The focus-group research was conducted to accomplish the following objectives:

> Identify perceptions of, and reasons for, the nursing shortage from the points of view of hospital administrators and nurse executives, student nurses, and practicing nurses.
>
> Compare the views of these three groups.
>
> Provide AHA with a way to compare these findings with the views expressed in the literature. (Miller, 1987:1).

Due to the small sample size and lack of randomness of respondents, the American Hospital Association researchers stated that the reported data should not be used when there

is a need for definitive results; instead, further study should be carried out (Miller, 1987).

Because there is a documented shortage of nurses in Arizona (Olsen and Lawrenz, 1987) and a decline in the pool of applicants as candidates for the nursing program at Phoenix College (Phoenix College records, 1984-88), and due to lack of definitive research data on the cause of the manpower shortage, this Major Applied Research Project was conducted. This study was designed to address the issue of the shortage of nurses and decline in enrollment in nursing programs and to identify strategies to increase student enrollment in nursing programs in Arizona.

## Background and Significance

"The hospital nursing shortage poses a serious threat to the health and welfare of this nation . . ." (McClure, et al. 1983:1). Because nurses provide the majority of care while patients are in hospitals, it is essential that the nursing shortage be resolved so patient care needs can be met. Unless hospitals can determine why they are unable to attract and retain competent professional nurses they will not solve the nursing shortage (McClure, et al., 1983).

In 1980 the American Academy of Nursing's Task Force on Nursing Practice conducted a study to determine why some hospitals were successful in attracting and retaining nurses (McClure, et al., 1983). Selected Fellows of the American

Academy of Nursing identified 165 such hospitals. These hospitals were called "magnet" hospitals. The task force studied a sample of 41 of these magnet hospitals by conducting group interviews (in eight regions of the country) with the hospital's director of nurses and staff nurses. From the group interviews the task force identified specific ingredients of magnetism that these hospitals possessed for professional nurses.

The findings of the study were presented and analyzed under the categories of administration, professional practice, and professional development. An entire data analysis of this study is not within the scope of this paper, but some of the significant findings were: participative management was practiced, the quality of the leadership in study hospitals was key to successful recruitment and retention of nurses, organizational structure was generally decentralized with extensive committee work taking place, the hospitals were adequately staffed, the nurses had autonomy in relation to their nursing practice, salaries and benefits were competitive or ahead of other hospitals in the area, there was a high value placed on education/teaching, the nurses believed their hospital administered high quality care, and the nurse was viewed as being professionally competent, valued and respected (McClure, et al., 1983).

At this same time other groups were also interested in the perceived shortage of nurses. Many councils and

commissions were formed to study this problem. The conclusion reached by most of these groups was that there was a shortage of skill level in nursing rather than a shortage in the number of nurses needed (Cohen, 1986).

By late 1986, the most recent nursing shortage began to attract media attention with coverage by USA Today and NBC's radio network (Perrin, 1987). Since then the nursing shortage has been the focus of attention on national broadcasting stations, cable television news and in leading newspapers and magazines. In cities throughout the United States, newspapers, journal articles and editorials carry such headlines as "This Nursing Shortage is Different" (Tregarthen, 1987:24), "Sudden Nursing Shortage Threatens Hospital Care" (Lewin, 1987:1), "Hospitals Scramble to Fill Shrinking Pool of Nurses" (Engel, 1987:19) and "National Study Shows Sharp Drop in the Number of College Freshman Planning Nursing Careers" (1987:530).

At the same time the Division of Nursing of the American Hospital Association (AHA) was receiving many queries relating to the declining student enrollment in nursing programs (Miller, 1987). As a result, the AHA Division of Nursing carried out a study using focus group research to identify perceptions and reasons for the nursing shortage from the point of view of nurse administrators, practicing nurses, and student nurses. Although the study was limited due to a small sample size and type of nurse respondents, the researchers listed a confluence of the

following factors to be responsible for declining enrollment in nursing programs:

> The drop in the number of young people in the available college-age pool.
>
> The recently enhanced opportunities for capable women in many formerly male-dominated fields.
>
> Public reaction to the extensive publicity (in the years 1983 to 1985) given to hospital closures and contraction in the health care workforce.
>
> The ongoing confusion about the outcome of state-by-state legislation affecting changes in entry into professional nursing practice (Miller, 1987:51).

Because there is a downtrend of students entering nursing programs each year, it appears that the supply of nurses will continue to dwindle. A national study conducted by the American Association of Colleges of Nursing (AACN) reports that there has been a 21 percent decline in generic baccalaureate enrollments (students with no past nursing education experience) from fall of 1983 to fall of 1987 (AACN, 1988). Another study reported that there was a 13.5 percent decline of full-time generic baccalaureate students between 1986 and 1987 (Redman and Jackson, 1987). A decline of enrollment is also occurring in associate degree nursing programs. Rosenfeld (1987a) reports that this decline began in 1984, when there was a 4.5 percent decline, followed in 1985 by an additional 8 percent decrease in enrollment in associate degree nursing programs.

Arizona is facing the same nursing shortage that has been documented across the nation. The Committee on Nursing Manpower and Education reports there is an estimated

shortage of over 3,700 professional nurses in Arizona. Based on a 1984 U.S. Department of Health and Human Services study and given the number of Arizona nursing graduates in 1985, the supply is not keeping pace with the demand (Olsen and Lawrenz, 1987).

This decline of enrollment has also been reported by the National League for Nursing. In the Nursing Data Review 1987 (1988), it was noted that total enrollment in all basic RN programs in Arizona decreased from 2,535 in 1983 to 1,816 in 1986. During spring semester, 1987, telephone inquiries were made to all Maricopa County (Arizona) basic nursing program directors/administrators. The directors/ administrators in six out of the seven colleges who accept basic nursing students reported fluctuations of enrollment in recent years and half of the directors reported a decrease in student enrollment. In addition, all but two program directors/administrators reported that their college had a drop in the pool of applicants who apply to the nursing program.

Although fewer students are entering nursing programs, projections by the Arizona Department of Economic Security support the need for an even greater number of nurses in the year 1992 due to the projected population growth rate in the state. It is projected that 23.2 percent more nurses will be needed by 1992 in Maricopa County alone (Minority Report Members of the Committee on Nursing Manpower and Education, A Response to Nursing: Arizona's

Plan for the Future, 1987). This projection affects long range planning for all of the Maricopa County Community Colleges (MCCCD) and the Baccalaureate Nursing programs in Maricopa County.

At Phoenix College (MCCCD) enrollment remained constant from the fall of 1984 to the fall of 1986. In the early part of the 1980s, nurses' incomes in Arizona rose above the inflation rate and were considerably higher than were those for teachers and other female professionals; therefore, Arizona was not experiencing a shortage of nurses (Olsen and Lawrenz, 1987). Thus, in 1984, an administrative decision was made at Phoenix College to limit enrollment for beginning nursing students to thirty-six students each semester. The Director of the Phoenix College nursing program believed that, with the number of student nurses graduating in the County, thirty-six students from Phoenix College would meet local needs and could best be accommodated by the staff and clinical facilities available at that time.

Examination of the Phoenix College admissions records showed that, beginning in the fall semester of the academic year 1986-87, there was a slight decline in nursing enrollment. Initially thirty-six students were selected as candidates for the program, but only thirty-one beginning students actually enrolled in the nursing program that semester. During the spring semester enrollment was again up to thirty-six students. However, the total number of

students represented a 7 percent decline in admission for the academic year 1986-87. In the 1987-88 academic year, a similar situation occurred as thirty-six potential students were selected as candidates for the program each semester, but only twenty-seven students were admitted in the fall semester as beginning students and only thirty-three students were admitted in the spring. This total number represents a 10 percent decline in admissions from the previous year. For the fall of 1988 the enrollment was again up to thirty-six students (Phoenix College Nursing Admission Records, 1984-88).

A second significant finding was that the number in the applicant pool of candidates had decreased from one hundred and twenty-five in the fall of 1984 to seventy-three in the fall of 1987, then up to eighty-one in the fall of 1988 (Phoenix College Nursing Admission Records, 1984-1988). Table 1 contains data on the number of the pool of applicants during each fall semester and the number of students who enrolled as beginning students each fall in the Phoenix College nursing program since 1984.

In view of the shortage of nurses in Maricopa County and the decline in the number of applicants for most of the nursing programs in the County, including Phoenix College, the nursing department at Phoenix College saw the need to investigate the reasons for the nursing shortage, the fluctuations in student enrollment and the decline in the pool of applicant candidates for the nursing programs. In

Table 1

Phoenix College's Pool of Nursing Applicants and Admissions: Fall Semester, 1984-88

| | Pool of Applicants | Fall Admissions |
|---|---|---|
| 1984 | 125 | 36 |
| 1985 | 104 | 36 |
| 1986 | 90 | 31 |
| 1987 | 73 | 27 |
| 1988 | 81 | 36 |

addition, the Phoenix College nursing department believes it is necessary to develop means to attract and retain potential qualified nursing candidates.

## Major Issues and Research Questions

This Major Applied Research Project used the case study method to determine the reasons for the present nursing shortage and decline in enrollment in nursing programs. Based on the findings from the literature, nursing interviews, nursing surveys, and analysis of records and documents related to the nursing shortage, conclusions and recommendations have been made for strategies to be implemented to attract potential candidates to the Phoenix

College nursing program and to assist in retention of nurses within the profession.

Specifically, the study explored the following questions:

1. What are the factors that nurse leaders, practicing nurses and nurse educators identify as plausible reasons for the nursing shortage?
2. What are the factors that nurse leaders, practicing nurses and nurse educators perceive as plausible reasons for the decline in the pool of applicants for nursing education programs?
3. What are the weaknesses in the nursing profession that have been a major influence on the nursing shortage and decline in the number of students entering nursing?
4. What are the strengths in the nursing profession and the actual practice of nursing that could attract people to nursing and retain them in the profession?
5. What strategies could be used to assist in increasing the applicant pool for nursing programs?
6. What means could colleges institute to assist nursing graduates to remain in the profession?

## Purpose

The purpose of this study was to identify factors that nurse leaders, practicing nurses and nurse educators perceive to be: (1) reasons for the nursing shortage and decline in enrollment in nursing programs, (2) weaknesses in the nursing profession which have contributed to the shortage of nurses and decline in student enrollment, (3) strengths in the profession that could attract candidates into nursing and retain them in the profession, and (4) strategies that could be implemented to attract more qualified students into nursing programs and retain them in the profession.

## Definition of Terms

For the purpose of this study, the following terms are defined according to present accepted usage:

1. Nurse: A person who has completed an accredited program of study in nursing and has successfully passed the National Council Licensure Examination for Registered Nurses (NCLEX).
2. Associate Degree Nurse (ADN): A nurse who graduated from an associate degree community college program with a major in nursing.
3. Baccalaureate Nurse (BSN): A nurse who graduated from a four-year college or university baccalaureate program with a major in nursing.

4. Nurse Leader: A nurse who holds a leadership position in nursing practice or nursing education.
5. Nurse Educator: A nurse who is on faculty at a college or university or is a nurse employed in an agency to teach some aspect of nursing or health.
6. Practicing Nurse: A nurse who works with patients or clients giving direct nursing care.

## Limitations

The primary limitations of this study are:

1. Results acquired from the survey instrument were limited to nurse leaders, nurse educators, and practicing nurses in Arizona.
2. The data obtained from interviews were limited to nurses residing in Maricopa County, Arizona.
3. A sample of convenience was used to collect data for the nurse interviews.
4. There was only a 20 percent return of questionnaires on the second survey administered.

## Assumptions

The analysis and recommendations based on the data acquired are contingent upon the following assumptions:

1. The perceptions obtained from the nurses surveyed in Arizona would be the same as nurses' perceptions across the United States.
2. The information obtained from interviewing nurses in Maricopa County would be similar to information that would be gathered from other nurses across the United States.

## Chapter 2

## REVIEW OF RELATED LITERATURE

Nursing is the largest and most diverse health care profession in the nation. Due to advances in scientific knowledge and application of technologies, plus interacting variables which affect health care, a severe nursing shortage has emerged (Olsen and Lawrenz, 1987).

In this case study, the literature review brings into focus the reasons that leaders in the field of nursing and health care give for the nationwide shortage of nurses and the decline in enrollment in programs of nursing. The literature review includes weaknesses within the profession that may have contributed to the shortage of nurses and identifies strengths within the profession that nursing leaders believe could be used as strategies to attract people into nursing and retain them in the profession.

### Factors Affecting the Present Nursing Shortage

Although there have been nursing shortages in the past, the current one appears to be different because nurses are leaving the practice of nursing at a time when there is a decline in the pool of applicants choosing nursing as a career (Tregarthen, 1987). Because this shortage is different, leaders in the health field are more concerned over the reasons behind the present shortage.

When discussing nursing needs, many leaders relate the large gap between supply and demand to the method in which we now classify diseases according to diagnostic related groups (DRGs). Tregarthen states:

> Perhaps the most commonly cited factor in the rising demand for nurses has been the introduction in 1983 of the "prospective payment" system . . . It requires hospitals to assign patients to one or more of 486 "diagnostically related groups." Medicare then pays only a fixed amount for a particular diagnosis, or DRG. Faced with a fixed payment, hospitals have tried to cut costs by limiting patient stays (Tregarthen, 1987:24).

There have been many ramifications in both the field of nursing and medicine as a result of this cost-containment measure. One direct effect is that patients who are now in hospitals are sicker. The 1987 Hospital Nursing Personnel Survey, conducted by the American Hospital Association Division of Nursing, reported that DRGs have created an increase in the average level of patient acuity (degree of acuteness and severity of patient's illness) in 81.3 percent of hospitals surveyed (Report of the Hospital Nursing Personnel Survey, 1987). Sicker patients require more nurses giving more constant care. This situation creates a more hectic atmosphere for nurses, one in which they are unable to give nurturing care, causing them to be chronically fatigued and less satisfied with their job. This feeling of fatigue and lack of job satisfaction has created a situation labeled burnout. Burnout, accompanied with present staffing shortages, has led to an even higher turnover as still more nurses are leaving the profession (Clark, 1987).

In a 1987 interview, the President of the American Nurses' Association (Margretta Styles) also addressed the issue of the effect of cost containment and how the change in health care financing has affected nursing. Styles stated that, even though we have a more active nursing work force, there are two major effects of the DRGs which relate directly to the present nursing shortage. First, the acuity of patients in hospitals has increased. These acutely ill patients demand intensive nursing care, which, in turn, has increased the need for more positions in nursing. Second, now that patients are being discharged into the community sooner, there is an increased need for nurses in community facilities. In addition to these reasons related to DRGs, Styles gives a third reason that more nurses are needed today. The demographics of an aging population have caused the nation to have more patients with chronic and multisystem illnesses, which has created a greater demand for nurses (Ulrich, 1987).

Richman (1987), who has written extensively on the nursing shortage, also discusses how the government's efforts to control hospital costs relate to the present shortage of nurses. Richman states that cost-containment measures have resulted in an increased need for nurses in public health, home health care, and nursing homes, which has resulted in an added scarcity of nurses in hospitals.

As recently as February 1988, the American Association of Colleges of Nursing (AACN) issued a statement

which reflects a similar view and concern regarding the nursing shortage and need for more nurses.

> The demand for well-prepared nurses in health care delivery has never been greater. Patients receiving care in acute care settings are sicker and require more intensive application of technology. In addition, changing demographics in our nation reflect an increasingly large population of frail elderly requiring knowledgeable and skilled nursing care (AACN, 1988:1).

The American Medical Association (AMA) has come up with a proposal that it feels would relieve the nation's shortage of bedside nurses. At the 1988 AMA National Convention, the house of delegates voted to proceed with a plan proposed by the AMA board to create and train a new category of health care worker. This worker would be called a registered-care technologist (RCT). Most nursing organizations, including the American Nurses' Association, the Nurses Association of the American College of Obstetricians and Gynecologists, and the National League for Nursing, strongly oppose the introduction of RCTs to relieve the nursing shortage. The major questions being raised by these and other nursing groups relate to who would take the responsibility for selection, education, supervision, and evaluation of the RCTs and the effect the RCTs would have on patient safety and the quality of the nation's health care (NAACOG, 1988; Lyons, 1988; and Lewis, 1988). Since the introduction of the proposal to train RCTs, a number of nursing conferences have taken place to investigate means to relieve the nursing shortage and study the implications of

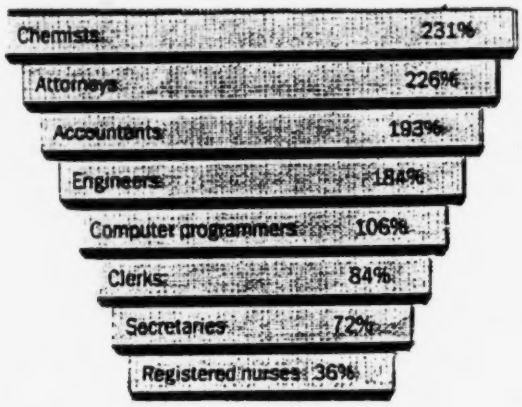
the RCT proposal (Tynan, 1988; Lewis, 1988; Flanagin, 1988; "AMA Votes to Back a New Bedside Care Giver," 1988).

In the literature it is stated that the nursing shortage cannot be relieved until nurses' salaries are increased comparable to other professions. Although there are slight geographical salary differences across the nation, there is general agreement that salaries are low as compared to male-dominated fields of employment. According to the Washington, D.C. Hospital Council wage survey, the average pay for a hospital staff nurse is $23,753, while hospital maintenance workers earn more than $25,000 a year and area bus operators have yearly salaries of $30,000 (Engel, 1987). The Report of the Hospital Nursing Personnel Survey (1987) conducted by the American Hospital Association, based on a sample of 719 community hospitals in the continental United States, reported that the average lowest annual salary for nurses was $20,205 and the average highest salary was $26,729.

Another critical problem related to nurses' salaries is that nurse salaries "top-off" at under $28,000. After a few years a nurse has nowhere to advance in the clinical setting, therefore, her salary does not increase. This leveling off of salaries forces many nurses to leave their profession to enter new careers with higher paying salaries (Selby, 1987).

According to the U.S. Department of Labor, nurses' earnings increase less over the course of their careers than

most workers (See Figure 1). Experts say this compression of career salary is one of the major reasons young people are reluctant to enter the field of nursing ("Vital Signs," 1988).




Source: Bureau of Labor Statistics. U.S. Dept. of Labor

Figure 1

Growth of Career Incomes

According to Kenneth Green, associate director of the Higher Education Research Institute at the University of California, "Women are beginning to look more like men in terms of their attitudes and values, especially when it comes to money, material rewards and to attitudes about job and career" (Engel, 1987:21). Green also states that, along with other traditionally female occupations, nursing has lost appeal to college freshmen. These factors help account for the present nursing shortage (Engel, 1987).

There are still other factors that contribute to the nursing shortage. Many women who do remain attracted to working in health care fields are setting higher goals.

Women have accounted for more than 50 percent of the graduates of health administration programs since 1983 and the numbers entering medical school are increasing yearly. Presently, 34 percent of first-year medical students are female ("Bigger Rewards Needed to Attract Nurses," 1987).

Another reason given for the shortage of nurses is that the profession of nursing is not valued in our society. In the media nurses are depicted as subservient and, in many instances, nothing more than sex objects. At the same time, women working in other careers, such as law enforcement and medicine, are shown as having exciting professions that command respect (Oski, 1987). This depiction of nursing, plus the media hype that nurses are abandoning nursing due to low pay, stress, and poor working conditions, cause those who stay in nursing to wonder why they are doing what no one else seems to want to do. Similarly, persons who are considering nursing become discouraged at the prospects of joining the ranks of the nursing profession (Woolley, 1987).

Thus, there is a decline in enrollment in nursing programs, which is another major reason for the present nursing shortage. M. Louise Fitzpatrick, chairperson of the ANA Cabinet on Nursing, states that the decline in enrollments in schools of nursing is the result of multiple factors (Selby, 1987). These factors are discussed in the next section of this literature review.

## Factors Contributing to the Decline in Enrollment in Nursing Programs

Frequently the reasons cited for the nursing shortage are similar to those reasons cited for the decline in enrollment in schools of nursing. At the same time the government instituted medical cost-containment strategies, it also cut funding for nursing programs and government grants to nursing students. In some instances this has forced closure of nursing programs (Richman, 1987). In 1987, the University of Nebraska at Lincoln, Boston University and American University announced plans to close their nursing schools. Due to public outcry, the University of Nebraska College of Nursing remained open but experienced severe budget cuts because the state legislature cut the entire university's budget by $3.1 million ("Enrollment Drop, Funding Cuts Threatens BSN Schools," 1987).

Another similarity between the nursing shortage and decline in enrollment in nursing programs is that there is a greater choice for women in education. Nursing has traditionally been a field occupied by women. There now are more careers open to women than there have been in the past and women are choosing these alternate careers (Rosenfeld, 1987b). A study conducted by the University of California at Los Angeles (UCLA) and the American Council on Education reports that 23 percent of the women surveyed are thinking about business careers, 11 percent are interested in teaching, 5.1 percent are considering a nursing career, and

record numbers are aiming for careers in medicine (3.4 percent), in law (4.0 percent), and in engineering (2.8 percent). According to the UCLA survey, the reason that large numbers of students are choosing these alternate careers is that a growing number of students feel that "being very well off financially" is an "essential" goal in life. The UCLA researchers also noted that the 5.1 percent of women that opted for nursing is the smallest percent of women to choose nursing over the past twenty years that UCLA has traced career trends ("National Study Shows Sharp Drop in the Number of College Freshmen Planning Nursing Careers," 1987).

In an editorial on the Nursing Shortage, Gioiella (1987:127) discusses the importance of wages, along with other reasons for women choosing a variety of educational options open to them in today's colleges. Gioiella states: "Young college-bound women today are seeking the opportunity for careers, not jobs, status, not subservience, competitive salaries, not low-ceiling wages . . .". Connie Curran, a nurse and vice-president of the American Hospital Association, states that there are more freshmen women in four-year colleges aiming to be doctors than nurses (Clark, 1987). This type of career choice for women has been reflected by declining enrollments in nursing educational programs. It is also one of the reasons frequently given for women leaving nursing.

As noted in this literature review, factors extrinsic to the actual practice of nursing are often given

for the shortage of nurses. However, others have identified actual weaknesses in the profession that have contributed to the shortage of nurses and decline in enrollment in nursing programs. The next section of this report will identify some of these weaknesses.

## Weaknesses Within the Nursing Profession

The clinical director of Nursing 87 conducted a survey on the severity of the nursing shortage (Norhold, 1987). The following year, the editors of Nursing 88 reported that 8,023 nurses had responded to their questionnaire. Not only did the nurses respond to the questionnaire items, they also wrote about side issues and problems that were causing them concern. The editors stated:

> Our survey apparently gave them a chance to vent, and vent they did--about the American Nurses' Association (ANA) position regarding entry levels . . . the lack of money (and yes, time) for more education . . . the push (with little payoff) for BSNs . . . the disenfranchisement of LPNs/ LVNs . . . and more ("Nursing Shortage Poll Report," 1988:34).

It was also stated in the report that nurses have different opinions over what they feel the entry level into nursing should be. "The biggest frustration is that nursing leadership can't pull the whole act together in a way that makes sense . . ." ("Nursing Shortage Poll Report," 1988:41).

In September 1988 the National League for Nursing's official publication, Nursing and Health Care, devoted their entire issue to the nursing shortage. In this publication,

Inlander (1988) noted that nurses do not have power and as long as the profession remains powerless, nursing school enrollments will continue to decline and the nursing shortage will remain. This weakness or problem that Inlander described is caused by the public viewing a nurse as a second class citizen when she is compared to a doctor. Inlander believes that this view can be changed if nurses organize and fight for independent practice in appropriate settings and involve the health consumer in helping to create major changes in the way health care is delivered in this country.

Gioiella (1987) also believes the image of nursing is a factor that has influenced the nursing shortage and enrollments in programs of nursing.

> Much has been written lately about the public image of nursing. Clearly the public's perception of the nurse is affecting recruitment. We are no longer attracting large numbers of young people into the profession, nor competing for the talented individual in search of a lifelong dynamic, rewarding, significant career (Gioiella, 1987:127).

Gioiella believes the reasons responsible for enrollment decline in nursing programs are related to the overall shortage of nursing. According to Gioiella, recruitment is influenced by conditions of employment. Those nurses in nursing practice who experience a high degree of job satisfaction will recruit new nurses.

The next section of this literature search identifies strengths in the nursing profession that nursing

leaders believe will help attract nurses to nursing programs and retain them in the nursing profession.

## Strengths of the Nursing Profession

"Students preparing for careers in nursing today have more job opportunities than ever before--not only the traditional jobs but new jobs developed within the last five years" (Hazzard, 1987:4). Many of these opportunities are in hospitals where patients are sicker and equipment is more sophisticated. In addition to working in hospitals, nurses may work in ambulatory surgical centers, home health care agencies, community agencies, clinics, physicians' offices, industry, and health maintenance organizations. Nurses are also becoming flight nurses, taking jobs overseas and even becoming entrepreneurs, setting up their own businesses in the areas of continuing education, wellness, and supplemental nursing services. This increase in employment opportunities, compounded by the nursing shortage, allows nurses to choose their jobs from a wide variety of nursing positions that are open to them today (Hazzard, 1987).

Another strength in nursing that may attract people to careers in nursing and help retain them in the profession is the emotional reward of caring for sick patients. In a recent Washington Post editorial, two nurses working at Bellevue Hospital were "spotlighted." Both nurses stressed the importance of inner rewards in giving them job

satisfaction and keeping them in the nursing profession (McCarthy, 1988).

The nursing shortage itself has created some positive reactions in relation to recruiting prospective students into nursing. Some nursing programs have created more flexible class schedules and have developed special accelerated nursing educational programs. In other instances, new scholarships, loans and free tuition plans have been made available for students in RN programs (Reed, 1987).

## Summary

In conclusion, the present critical shortage of nurses and decline in enrollment in nursing programs is a complex issue that is being addressed by leaders in many areas of the health care system. The information cited above that has been presented by leaders in nursing and allied health fields does not nearly represent the totality of what has been published about the present nursing shortage. However, they provide an illustration of the nature of the studies and publications involving the shortage of nursing and the decline in enrollment in nursing programs, both from a theoretical foundation and practical viewpoint.

As we can see from the literature, the following seems to be the main reasons identified by nursing and health

professionals as the cause of the shortage of nursing and decline in enrollment in nursing programs:

1. Nurses are leaving the practice of nursing at a time when there is a decline in the pool of applicants choosing nursing as a career.
2. Nurses' salaries are low as compared to other professions.
3. At the present time there are more career opportunities open for women.
4. Women who have traditionally chosen a nursing career in the past are now selecting alternate careers which offer higher economic rewards and greater prestige.
5. Presently nursing has a poor public image.
6. There is a need for a greater number of nurses to work in hospitals due to an aging population and more acutely ill patients.
7. There is a greater need for more nurses to work in community agencies as patients are being discharged from the hospital while they still require nursing care.

These theories postulated by several leading authorities in nursing and health care reflect the seriousness of the problem along with the need for additional research to document the cause of the shortage of nurses and decline in enrollment of nursing programs.

Chapter 3

# PROCEDURES AND METHODOLOGY

## Introduction

In this case study, there were a number of processes used for the collection of data. The first process consisted of an intensive review of the literature on the shortage of nurses and decline in enrollment in nursing programs, Phoenix College nursing admissions records and documents related to nursing manpower and future needs in Arizona.

Following this initial collection of data, interviews were conducted with ten nurse leaders, ten nurse educators, and ten practicing nurses. The goal of this segment of the study was to identify what nurses in Maricopa County (Arizona) believed to be the reasons for the nursing shortage and the decline in enrollment in nursing programs. These nurses were also asked to identify weaknesses within the profession that may have contributed to the nursing shortage and the strengths that were available within the profession which might be used to reverse this manpower shortage.

Next, two different questionnaires were sent to registered nurses who worked in Arizona. The purpose of the first questionnaire was to have nurses in Arizona: (1) list their perceptions of the reasons for the shortage

of nursing and decline in enrollment in nursing programs, (2) identify weaknesses within the profession that might contribute to this manpower shortage, and (3) identify strengths within the profession that might attract people into nursing and keep them in the profession. The first questionnaire was sent to a random sample of 700 Arizona nurses which were taken from a list of mailing labels purchased from the Arizona State Board of Nursing.

Using data from the first questionnaire, a second questionnaire was developed to determine what Arizona nurses perceived to be strategies to attract nurses into nursing programs and to identify ways to retain them in the profession. The second questionnaire was sent to the 30 nurses previously interviewed and to another 670 randomly selected nurses who worked in Arizona. In order to obtain a more comprehensive view of nurses perceptions in Arizona, a second random sample of nurses was used for the second questionnaire.

## Data Sources

### Literature Review

Data for this portion of the study were obtained from an intensive literature search on the nursing shortage and decline in enrollment in nursing programs. The Review of Literature for this study consisted of: (1) ERIC search, (2) Information Retrieval Service at Nova University, (3) Database Nurse Search at Arizona State University,

(4) Maricopa County Colleges' Database Card Catalog, (5) Arizona State University's Selected Database Card Catalog, (6) Nursing and Allied Health Literature Index, (7) Readers Guide to Periodical Literature, and (8) Phoenix College Nursing Admission Records.

### Interview of Nurse Leaders, Nurse Educators, and Practicing Nurses

To obtain nurses' perceptions on the nursing shortage and decline in enrollment in nursing programs, ten nurse leaders, ten nurse educators and ten practicing nurses who resided in Maricopa County (Arizona) were interviewed. The questions used in the interviews were developed from the knowledge base established from the review of literature.

### Questionnaire Survey of Nurse Leaders, Nurse Educators, and Practicing Nurses

Additional data on nurses' perceptions of the cause of the nursing shortage and decline in enrollment in nursing programs were obtained from nurses in Arizona through a survey questionnaire sent to a random sample of 700 nurses employed in Arizona. The questionnaire that was sent consisted of the same questions asked in the interviews. Based on findings from the first questionnaire, a second questionnaire was developed and sent to another 700 nurses who worked in Arizona. This second questionnaire elicited nurses' perceptions on strategies that could be used to

attract potential candidates into nursing and keep them in the profession.

## Data Collection Instruments

### Interview Questions

From the knowledge base established by the literature review on the nursing shortage and decline in enrollment in nursing programs, specific questions for the interviews were developed to insure consistency of data collection. The interviews were focused to collect the following data: (1) plausible reasons for the nurse shortage and for the decline in the pool of applicants in the nursing programs, (2) weaknesses in the nursing profession that are seen to have had a major influence on the nursing shortage and the decline in enrollment in nursing programs, and (3) strengths in the nursing profession and the practice of nursing that could attract people to nursing and retain them in the profession.

While developing the questions, consultation was obtained from a professor at Arizona State University (ASU) who serves as a research consultant for the nursing faculty (Hepworth, 1988). Additional consultation was obtained from a professor at ASU who teaches research concepts to masters degree nursing students (Feller, 1988). Content validity was obtained prior to conducting the interviews and sending out the questionnaire.

Survey Questionnaires

Based on questions developed for the nursing interviews, an open-ended questionnaire was formulated. The questionnaire asked nurses to respond to the following: (1) reasons for the shortage of nurses, (2) reasons some hospitals and specialty groups do not have a shortage of nurses, (3) accuracy of the media reporting related to the nursing shortage, (4) reasons for the decline in the number of applicants for nursing programs, (5) weaknesses in the nursing profession that have been a major influence on the nursing shortage and decline in the number of students entering nursing, and (6) strengths in the nursing profession and the actual practice of nursing that could attract people into the nursing profession. The survey questionnaire and cover letter are contained in Appendix A.

Based on information gained from content analysis of the first questionnaire, a second questionnaire was developed to determine strategies that nurses would propose to attract qualified students into college nursing programs and means that colleges could use to contribute to keeping nurses in the profession. This questionnaire was organized around the ten major areas of concern and/or strengths identified in the first questionnaire. The ten identified areas included: financial rewards, working conditions, autonomy, leadership/administrative support, nurse physician relationships, unity in ranks, educational goals/programs, challenge/advancement, value of nursing, and morale.

The professors who assisted with the development of the interview questions were also utilized as consultants for the development of the questionnaire survey. The second survey questionnaire and cover letter are contained in Appendix B.

## Data Collection Procedure

### Interviews

The following procedure was used to select the persons to be interviewed in the study:

1. Ten nurses in leadership roles in Maricopa County (Arizona) were contacted. These persons were asked to participate in the study by agreeing to be interviewed on their perceptions relating to the nursing shortage and the decline in enrollment in nursing programs.
2. Each of the selected nurse leaders was also asked to recommend one practicing nurse who would be a good candidate to interview to obtain a practicing nurse's perception relating to the nursing shortage and decline in enrollment of students in programs of nursing. (A total of ten practicing nurses were contacted.)
3. To obtain the names of ten nurse educators, the program directors and/or deans of the colleges and university within Maricopa County were contacted. Five of the program directors/deans

were asked to participate in the study by agreeing to be interviewed. Five of the program directors/deans were asked to recommend the name of a nursing faculty member who would be a good candidate to interview regarding the educators' perceptions on the nursing shortage and decline in student enrollment. (A total of ten nurse educators were selected to be interviewed. By drawing names from a pool, a random selection process was used to determine if a program director/dean or a faculty member was to be interviewed at each school).

After the candidates to be interviewed were selected, interview appointments were scheduled. All nurses who were contacted agreed to be interviewed. The interviews were conducted from June to September of 1988. Following the first two interviews, the decision was made to tape-record the interview sessions for ease of reference and data tabulation.

Questionnaire Survey

After the initial survey questionnaire was formulated, it was submitted to selected nurses and faculty for review. Revisions were made in accordance with the recommendations made by reviewers of the questionnaire. The revised questionnaire content was then used during the first ten interviews for additional validation.

The final version of the survey questionnaire and cover letter was typed, duplicated, and sent out to a random sample of nurses in Arizona. (The questionnaire and cover letter are contained in Appendix A). The process for selecting the random sample consisted of first purchasing from the Arizona State Board of Nursing a list of mailing labels containing the names and addresses of all 26,300 registered nurses employed in Arizona. To obtain a random selection of 700 nurses, every 37th label (from the State Board of Nursing list) was selected.

Based on content analysis and the categories identified in the first questionnaire, a second questionnaire was developed to determine strategies that could be proposed to attract qualified students into college nursing programs and to identify means that the colleges could contribute to keeping nursing graduates in the profession. Once the second questionnaire was complete, it was submitted to selected nurses and nursing faculty for review. Revisions were made in accordance with the recommendations made by the reviewers.

The revised questionnaire was typed, duplicated, and sent to the 30 nurses previously interviewed and to an additional 670 nurses. To obtain a random selection of nurses in Arizona every 37th Arizona State Board of Nursing mailing label (beginning with the 10th label name) was selected. (The questionnaire and cover letter are contained in Appendix B).

Interview and Questionnaire Responses

The data from the interview and questionnaire responses from the first survey were analyzed as follows:

1. Descriptive statistics were used to analyze the demographic data of those interviewed and surveyed. Demographic data included: age, gender, years as a nurse, full-time/part-time, type of employing agency, and highest level of education completed.
2. All responses to the open-ended questions asked during the interviews and in the questionnaire were reviewed and analyzed. From this review process, twenty-five categories were initially identified. After a more critical review of responses, it was found that the responses could be grouped according to more specific commonalities which emerged. These commonalities were then developed into the following major categories: career and self-development, image in nursing, professional practice, organization/administration, and miscellaneous responses. From these major categories, subcategories evolved in which to further classify the responses. Appendix C contains the complete classification of these categories. As a validation process, another researcher/consultant who is a former teacher in

the Maricopa County College District tabulated a sample of the questionnaires. There was a 92-93 percent agreement on the tabulation of responses.

3. Following the placement of responses in appropriate categories, the Statistic Analysis System (SAS) program was used to determine frequency and percentage of responses.
4. The same procedure was used to analyze the data from the second questionnaire.

Appendix D contains the complete classification of each question and categories that evolved from responses on the second questionnaire.

Chapter 4

# PRESENTATION OF RESULTS

## Introduction

This study utilized the interview technique and a questionnaire to collect data from nurses in Arizona to determine their perceptions on the cause of the nursing shortage and the decline in enrollment in nursing programs. The interviews were done with a sample of convenience of nurses in Maricopa County and the questionnaire was mailed to a random sample of nurses employed in nursing throughout Arizona.

Data tabulation consisted of content analysis of information obtained in the interviews and from questionnaire responses. As the responses were carefully reviewed, commonalities were seen that were organized into categories. The major categories that emerged from the first questionnaire were: career and self-development, image of nursing, professional practice, organization/ administration, and a miscellaneous category. Further analysis of the data revealed that responses under major categories could be further classified into subcategories due to similarity of responses.

Utilizing the data obtained from the interviews and first questionnaire, a second questionnaire was developed to

identify strategies that could be implemented to attract potential candidates into nursing and keep them in the profession. The second questionnaire was sent to 700 nurses working in Arizona. The data tabulation and content analysis of the responses from the second survey questionnaire were performed similarly to the method used in the first questionnaire. Commonalities of responses for each area listed on the questionnaire were also seen when the data from the second questionnaire were analyzed. Due to these similarities, the responses were grouped together in categories. These categories were arranged under the ten areas of concern and/or potential for strength in the nursing profession listed in the questionnaire.

## Interviews and First Questionnaire

### Demographic Data

The nurses who were interviewed consisted of a sample of convenience of ten nurse leaders, ten nurse educators, and ten practicing nurses working in Maricopa County (some of the nurses who were interviewed had dual roles and were both nurse leaders and nurse educators and/or practicing nurses). All thirty (100 percent) nurses that were asked to be interviewed agreed to participate in the study. Of the nurses interviewed, twenty-nine (97 percent) were female and one was male (3 percent).

The questionnaire was sent to a random sample of 700 nurses working in Arizona. Two hundred forty-one

(34 percent) of the nurses returned the questionnaire. The gender distribution of those nurses returning the survey questionnaire was similar to those interviewed. Two hundred thirty-one (97 percent) surveyed nurses were female and eight (3 percent) were male.

The age of the nurses interviewed and the nurses surveyed ranged between twenty-one and sixty-one years of age. The majority (70 percent) of the nurses interviewed ranged between the age of forty-one and sixty and the majority (64 percent) of the nurses surveyed ranged between the age of thirty-one and fifty. Table 2 lists the ages of all the nurses interviewed and surveyed.

Table 2

Demographic Distribution of Nurses Interviewed and Nurses Surveyed by Age

| Age Group | Nurses Interviewed No. | % | Nurses Surveyed No. | % |
|---|---|---|---|---|
| 21-30 | 2 | 7 | 30 | 12 |
| 31-40 | 5 | 17 | 97 | 40 |
| 41-50 | 13 | 43 | 58 | 24 |
| 51-60 | 8 | 27 | 43 | 18 |
| 61 or Older | 2 | 7 | 13 | 6 |

The employment status of those interviewed and those surveyed varied somewhat. All the nurses who were interviewed were employed full time. Of these nurses, two

had two part-time positions. For the nurses surveyed, one hundred sixty-seven (69 percent) were employed full time and fifty-seven (24 percent) were employed part time. Although the labels purchased from the Arizona State Board of Nursing were to include only employed nurses, there were seventeen (7 percent) of the nurses who were retired or unemployed.

The length of time the interviewed nurses had been employed ranged from two years to forty years while the surveyed nurses had been employed from one year to forty-six years. Table 3 shows the length of employment (in ten year blocks) of all nurses interviewed and surveyed.

Table 3

Demographic Data of Nurses Interviewed and Nurses Surveyed by Length of Employment

| Years of Employment | Nurses Interviewed | | Nurses Surveyed | |
|---|---|---|---|---|
| | No. | % | No. | % |
| 1-10 | 4 | 13 | 85 | 35 |
| 11-20 | 6 | 20 | 8 | 36 |
| 21-30 | 10 | 33 | 33 | 14 |
| 31-40 | 10 | 33 | 32 | 13 |
| 41-50 | 0 | 0 | 4 | 2 |

The type of employing agencies of those interviewed and those surveyed varied somewhat. Twelve of the interviewed nurses (40 percent) were employed by hospitals, twelve (40 percent) were employed by a college or

university (two of these nurses had two part-time positions) and five were employed by the county or state (16 percent). The other three nurses interviewed were employed by a private office or agency. Of those returning questionnaires, one hundred forty (58 percent) were employed by hospitals, thirty-four (14 percent) were employed by the county or state, thirty (12 percent) were employed by a private office or agency (including self-employment), twelve (5 percent) were employed by a grade school/high school, twelve (5 percent) were employed by a college/university, and two (1 percent) nurses were employed by the federal government. The remaining eleven (5 percent) nurses were unemployed or did not give a response to this item. The types of agencies in which these nurses were employed is displayed in Table 4.

The level of education (by degree) of the nurses interviewed was somewhat higher than those who responded to the questionnaire. The interviewed nurses were divided between nurses with an associate degree, a bachelor's degree, a master's degree, and a doctorate degree. Four (13 percent) nurses held an associate degree, eight (27 percent) held a bachelor's degree, thirteen (43 percent) held a master's degree, and five (17 percent) held a doctorate. The highest level of education (by degree) of the questionnaire respondents was mainly divided between nurses with an associate degree, a nursing school diploma, or a bachelor's degree. Seventy-two (30 percent) of the

Table 4

Demographic Distribution of Nurses Interviewed and Nurses Surveyed by Type of Employing Agencies

| Type of Agency | Nurses Interviewed No. | % | Nurses Surveyed No. | % |
|---|---|---|---|---|
| Hospital | 12* | 40 | 140 | 58 |
| College or University | 12* | 40 | 12 | 5 |
| Grade School/High school | 0 | 0 | 12 | 5 |
| Private office or Agency | 3* | 10 | 30 | 12 |
| County or state | 5 | 16 | 34 | 14 |
| Federal | 0 | 0 | 2 | 1 |
| Unemployed or no response | 0 | 0 | 11 | 5 |

*Two interviewed nurses held two part-time positions in these agencies.

nurses held an associate degree, sixty-three (26 percent) held a diploma, seventy-nine (37 percent) held a bachelor's degree, twenty-one (9 percent) held a master's degree, and one (0.4) percent held a doctorate. Six nurses (2 percent) did not respond to this item. Table 5 contains the demographic distribution of nurses interviewed and nurses surveyed by educational degree.

In both the interview group and survey group, some nurses had additional hours toward another degree and/or met requirements qualifying them for a special certification.

Table 5

Demographic Distribution of Nurses Interviewed and Nurses Surveyed by Educational Degree

| Certificate/Degree | Nurses Interviewed No. | % | Nurses Surveyed No. | % |
|---|---|---|---|---|
| Associate | 4 | 13 | 63 | 26 |
| Nursing Diploma | 0 | 0 | 72 | 30 |
| Bachelor's | 8 | 27 | 78 | 33 |
| Master's | 13 | 43 | 21 | 9 |
| Doctorate | 5 | 17 | 1 | 0.4 |

Note: Some nurses had additional hours toward another degree.

Existence of Nursing Shortage

During the interview and on the questionnaire, the nurses were asked if they believed there was a shortage of nurses in the county in which they resided, in Arizona, and in the USA. Twenty-eight (96 percent) of the nurses interviewed responded there was a shortage in the county in which they resided and twenty-nine (97 percent) believed there was a shortage in both Arizona and the USA. For the nurses surveyed, one hundred eighty-three (78 percent) believed there was a shortage in the county in which they resided, two hundred two (87 percent) responded there was a shortage in Arizona and two hundred fourteen (93 percent) believed there was a shortage in the USA. Table 6 shows

data on the nurses' beliefs regarding a nursing shortage in the county, state, and country.

Table 6

Nurses' Beliefs Regarding Existence of a Nursing Shortage

| | Nurses Interviewed | | | | Nurses Surveyed | | | |
|---|---|---|---|---|---|---|---|---|
| | Yes | | No | | Yes | | No | |
| Location | No. | % | No. | % | No. | % | No. | % |
| County | 28 | 96 | 2 | 4 | 183 | 78 | 52 | 22 |
| Arizona | 29 | 97 | 1 | 3 | 202 | 87 | 32 | 13 |
| USA | 29 | 97 | 1 | 3 | 214 | 93 | 16 | 7 |

Media Treatment of Nursing Shortage

During the interview and on the questionnaire, the nurses were asked if they believed that the media depicted the nursing shortage accurately. Approximately half (42 to 53 percent) of the nurses interviewed and surveyed stated that the media was fairly accurate in reporting the nursing shortage. The responses of the other nurses varied from very accurate to not accurate or unsure. Table 7 shows all of the responses regarding the nurses' perceptions on the accuracy of the media's coverage of the nursing shortage.

Categorization of Responses

The remaining questions asked in the interview and on the questionnaire were open-ended so the nurses would give their own perceptions instead of a forced response to

Table 7

Accuracy of Media's Coverage of the Nursing Shortage

| Degree of Accuracy | Nurses Interviewed No. | % | Nurses Surveyed No. | % |
|---|---|---|---|---|
| Very accurate | 6 | 20 | 40 | 17 |
| Fairly or somewhat accurate | 16 | 53 | 100 | 42 |
| Inaccurate | 4 | 13 | 58 | 24 |
| Unsure of accuracy | 4 | 13 | 41 | 17 |

predetermined options. The nurses were asked to identify three major reasons why they believed a shortage of nursing existed. The responses given by both groups were classified under the major categories of: career and self-development, image of nursing, professional practice, and organization/administration.

The most frequent subcategories that emerged from the interviewed nurses were: other desirable career opportunities open for women (22 percent), lack of adequate financial compensation (20 percent), poor general working conditions (12 percent), and lack of unity within the ranks of nursing (10 percent). The most frequent subcategories that emerged from the questionnaire responses were: lack of adequate financial compensation (30 percent), poor general working conditions (18 percent), and negative value of nursing as a career choice (11 percent).

The following responses are typical of those obtained from the interviewed nurses and surveyed nurses:

> "There are now more business opportunities available for women and thus women have opportunity for jobs with better hours and more glamorous work."
>
> "People no longer see nursing as a wise career choice due to low salaries in relation to educational requirements and job responsibilities."
>
> "There is not adequate remuneration for the present educational requirements and job responsibilities of nurses."
>
> "Lack of recognition within employment setting by other professional groups and by the public."
>
> "Working conditions do not compare favorably with other professions, for instance, undesirable hours, hospitals being understaffed causing nurses to work under very stressful situations."

Table 8 shows the major categories and subcategories of responses taken from the nurses' perceptions on reasons for the shortage of nurses.

When the nurses were asked why they believed that some hospitals and specialty groups were not experiencing a shortage of nurses, their responses varied. The responses from both the nurses interviewed and nurses surveyed were classified under the major categories of: image of nursing, professional practice, organization/administration, and miscellaneous categories.

The greatest number of responses given by the nurses interviewed were in the subcategories of: good general working conditions (17 percent), adequate financial rewards (15 percent), job availability in area/specialty (15 percent), autonomy promoted for the nurses (14 percent),

Table 8

Categories of Responses Depicting Reasons for Shortage of Nurses

| CATEGORY | Interviewed Nurses' Responses No. | % | Surveyed Nurses' Responses No. | % |
|---|---|---|---|---|
| CAREER AND SELF-DEVELOPMENT | | | | |
| Other desirable career opportunities open for women | 20 | 22 | 59 | 9 |
| IMAGE OF NURSING | | | | |
| Negative value of nursing as a career choice | 8 | 9 | 74 | 11 |
| Educational programs not adequate to meet needs | 5 | 5 | 22 | 3 |
| Poor morale leading to burnout | 5 | 6 | 31 | 5 |
| PROFESSIONAL PRACTICE | | | | |
| Lack of adequate financial compensation | 18 | 20 | 195 | 30 |
| Lack of autonomy for nurses | 3 | 3 | 13 | 2 |
| Lack of unity within the ranks of nursing | 9 | 10 | 47 | 7 |
| Poor nurse/physician relationship | 0 | 0 | 29 | 4 |
| ORGANIZATION/ADMINISTRATION | | | | |
| Lack of support from administration | 4 | 4 | 27 | 4 |
| Poor general working conditions | 11 | 12 | 123 | 18 |
| Lack of leadership | 0 | 0 | 10 | 2 |

Notes: There were 7 additional miscellaneous subcategories with only one response reported by interviewed nurses. There were 27 additional miscellaneous subcategories with less than 10 responses reported by surveyed nurses.

and positive value of the nurse (12 percent). The greatest number of responses given by the nurses surveyed were under the subcategories of: adequate financial rewards (23 percent), good general working conditions (17 percent), and positive administrative support (17 percent).

Some typical responses the interviewed nurses and surveyed nurses gave to this question were:

> "Morale is good, and there is a caring attitude of staff towards each other and their job."
>
> "In these places, nurses have power and control over their practice and there is a more collegial relationship with others in the health team including the doctors."
>
> "Outstanding pay and good benefits in comparison to competing hospitals."
>
> "Administration tries to understand their needs and concerns. The nurses are treated as professionals."
>
> "Demographics of geographical area may not need as many nurses or the area may have more nurses because nurses want to live there or circumstances force them to stay in an area."
>
> "May be due to special benefits that the hospital offers, such as flexible hours and child care."

Table 9 lists the categories and subcategories of the responses given regarding the nurses' perceptions as to why some hospitals and specialty areas are not experiencing a shortage of nurses.

When the interviewed and surveyed nurses were asked why they believed there was a decline in the number of students applying for nursing programs, their responses fell under the categories of: career and self-development, image

Table 9

Categories Depicting Why Some Hospitals and Specialty Groups are Not Experiencing a Shortage of Nurses

| CATEGORY | Interviewed Nurses' Responses No. | % | Surveyed Nurses' Responses No. | % |
|---|---|---|---|---|
| IMAGE OF NURSING | | | | |
| Positive value of the nurse | 6 | 12 | 31 | 8 |
| PROFESSIONAL PRACTICE | | | | |
| Offer adequate financial rewards | 8 | 15 | 83 | 23 |
| Promote autonomy for nurses | 7 | 14 | 27 | 7 |
| Maintain unity within the ranks of nursing | 2 | 4 | 12 | 3 |
| ORGANIZATION/ADMINISTRATION | | | | |
| Positive administrative support | 3 | 6 | 32 | 17 |
| Good general working conditions | 9 | 17 | 62 | 17 |
| MISCELLANEOUS | | | | |
| Job availability in area/specialty | 8 | 15 | 22 | 6 |
| Don't know or unsure | 6 | 12 | 27 | 7 |

Note: There were 3 additional miscellaneous subcategories with only one response reported by interviewed nurses. There were 84 additional miscellaneous subcategories with less than 10 responses reported by surveyed nurses.

of nursing, professional practice, and organization/ administration.

The nurses interviewed gave responses that were mostly classified under the subcategories of: lack of adequate financial compensation (30 percent), other desirable career opportunities open for women (22 percent),

negative value of nursing (18 percent), and poor working conditions (11 percent).

The surveyed nurses gave responses that were mostly classified under the subcategories of: lack of adequate financial compensation (31 percent), other desirable career opportunities open for women (27 percent), and negative value of nursing (16 percent).

Typical responses given were:

> "Social values have changed and now young people see money and prestige more important than humanistic values."
>
> "Women's movement has given more opportunities for women to work in other areas in addition to nursing. They can now go into a field with more prestige."
>
> "The image of nursing isn't as attractive as it could be and thus fewer people are choosing nursing."
>
> "The public hears about nursing and all the problems, such as poor working conditions, and thus the prospective student asks who wants this and doesn't apply to the nursing program."
>
> "Nursing is not the glamour profession it once was thought to be."
>
> "Word is out that nursing is a very stressful and difficult job."

Table 10 gives the categories and subcategories of responses given regarding reasons for declining enrollment in nursing programs.

When the nurses were asked to identify weaknesses in the nursing profession and the practice of nursing that may have contributed to the shortage of nurses and decline in enrollment in nursing programs, their responses fit under

Table 10

Categories Depicting Reasons some Schools of Nursing are Experiencing Decline in Student Enrollment

| CATEGORY | Interviewed Nurses' Responses No. | % | Surveyed Nurses' Responses No. | % |
|---|---|---|---|---|
| CAREER AND SELF-DEVELOPMENT | | | | |
| Other desirable career opportunities | 15 | 22 | 111 | 27 |
| IMAGE OF NURSING | | | | |
| Negative value of nursing as a career choice | 13 | 18 | 66 | 16 |
| Nursing education programs not attractive | 2 | 3 | 15 | 4 |
| PROFESSIONAL PRACTICE | | | | |
| Lack of adequate financial compensation | 20 | 30 | 126 | 31 |
| Lack of unity within the ranks of nursing | 6 | 9 | 13 | 3 |
| ORGANIZATION/ADMINISTRATION | | | | |
| Poor general working conditions | 8 | 11 | 35 | 9 |

Notes: There were 4 additional miscellaneous subcategories with only one response reported by interviewed nurses. There were 27 additional miscellaneous subcategories with less than 10 responses reported by surveyed nurses.

the major categories of: image of nursing, professional practice, and organization/administration.

The most frequent responses given by the interviewed nurses were classified under the subcategories of lack of unity within the ranks of nursing (30 percent), negative value of nursing as a career choice (20 percent), and poor general working conditions (9 percent). The subcategories

that emerged from the surveyed nurses were classified under the subcategories of: lack of unity within the ranks of nursing (30 percent), lack of adequate financial compensation (17 percent), poor general working conditions (12 percent), and negative value of nursing as a career choice.

A sample of some of the typical responses to this question were:

> "Lack of unity among nurses themselves."
>
> "Disharmony and inability to coordinate our efforts at what our profession is and even what requirements we should have for educational preparation of nurses."
>
> "Nurses have not tried to band together to form a large enough voice in society to increase the value of the registered nurse."
>
> "Nurses do not stand together and support each other nor do they give recognition to other nurses."
>
> "Stress, burnout, patient overload, and not being able to provide good nursing care."
>
> "Inferior benefits and salaries in comparison to other fields."
>
> "Poor pay, increased responsibility with increased paperwork that takes more time away from the patient care."

Table 11 lists the categories and subcategories of responses given regarding the nurses' perceptions of weaknesses within the profession which contributed to the nursing shortage.

When the nurses were asked what strengths they saw in the nursing profession and the practice of nursing that could attract people to nursing, the responses fell under

Table 11

Categories of Responses Depicting Nurses' Perceptions of Weaknesses within Profession Contributing to Shortage

| CATEGORY | Interviewed Nurses' Responses No. | % | Surveyed Nurses' Responses No. | % |
|---|---|---|---|---|
| IMAGE OF NURSING | | | | |
| Negative value of nursing as a career choice | 11 | 20 | 39 | 9 |
| Educational programs not adequate to meet needs | 0 | 0 | 24 | 6 |
| Poor morale leading to burnout | 0 | 0 | 21 | 5 |
| PROFESSIONAL PRACTICE | | | | |
| Lack of adequate financial compensation | 5 | 9 | 74 | 17 |
| Lack of autonomy | 3 | 6 | 0 | 0 |
| Lack of unity within the ranks of nursing | 16 | 30 | 91 | 30 |
| Poor nurse/physician relationship | 0 | 0 | 17 | 4 |
| ORGANIZATION/ADMINISTRATION | | | | |
| Lack of administrative support | 4 | 7 | 33 | 8 |
| Poor general working conditions | 5 | 9 | 53 | 12 |
| Lack of leadership | 0 | 0 | 22 | 5 |

Notes: There were 10 additional miscellaneous subcategories with only one response reported by interviewed nurses. There were 54 additional miscellaneous subcategories with less than 10 responses reported by surveyed nurses.

the major categories of: career and self-development, image of nursing, professional practice, and miscellaneous.

The subcategories that emerged from the interviewed nurses' responses were: variety of other career

opportunities available in nursing (22 percent), opportunity for advancement/challenge (17 percent), and opportunity to meet educational goals (17 percent). The subcategories that emerged from the surveyed nurses' responses were: altruistic value of nursing (26 percent), job availability (14 percent), opportunity for advancement (13 percent), and variety of other career opportunities available in nursing (11 percent). Twelve percent of the nurses responded that they did not know or were unsure.

Typical responses the nurses gave relating to the strengths that might attract people to nursing included:

> "Nursing is challenging, has variety, is interesting, and is rewarding."
>
> "There are opportunities to assist people to greater wellness. Nursing remains a fulfilling, rewarding profession."
>
> "Many areas of practice in nursing enable the nurse to have a choice of where he/she would like to work."
>
> "I feel that any nurse who is creative and assertive can develop unique roles in nursing."
>
> "I don't know. If you know the answer to this one, you will solve the nursing shortage."
>
> "A nurse knows she will have a consistent salary, always have a job, and can live anyplace she wishes."
>
> "There is no end to the advancement you can make and the opportunities you can explore. Nursing is making massive advancements, is constantly changing and thus there are opportunities for growth potential."

Table 12 contains the interviewed nurses' and surveyed nurses' responses to strengths within the

profession that could attract people to nursing by categories and subcategories.

Table 12

Categories of Responses Depicting Strengths Within the Profession that Could Attract People to Nursing

| CATEGORY | Interviewed Nurses' Responses No. | % | Surveyed Nurses' Responses No. | % |
|---|---|---|---|---|
| CAREER AND SELF-DEVELOPMENT | | | | |
| Opportunity to meet educational goals | 11 | 17 | 0 | 0 |
| Ability to meet personal needs | 2 | 3 | 17 | 05 |
| Altruistic value of nursing | 0 | 0 | 94 | 26 |
| Variety of career opportunities available in nursing | 14 | 22 | 41 | 11 |
| Opportunity for advancement and challenge | 11 | 17 | 46 | 13 |
| IMAGE OF NURSING | | | | |
| Positive value of the nurse | 2 | 3 | 13 | 4 |
| PROFESSIONAL PRACTICE | | | | |
| Unity within the profession and ranks of nursing | 5 | 8 | 23 | 6 |
| Adequate financial compensation | 2 | 3 | 10 | 3 |
| Opportunity for autonomy for nurses | 2 | 3 | 0 | 0 |
| MISCELLANEOUS | | | | |
| Job availability | 0 | 0 | 49 | 14 |
| Don't know/unsure | 3 | 5 | 45 | 12 |

Note: There were 4 additional miscellaneous subcategories with only one response reported by interviewed nurses. There were 20 additional miscellaneous subcategories with less than 10 responses reported by surveyed nurses.

## Second Questionnaire

### Demographic Data

The second questionnaire was sent to the 30 nurses previously interviewed and to another 670 randomly selected nurses who work in Arizona. One hundred thirty-eight (20 percent) of the nurses returned the questionnaire. Ten questionnaires did not contain usable data. Seven nurses were retired and stated they did not feel qualified to respond accurately and three sent long letters voicing their concerns and giving suggestions, but did not fill out the questionnaire that was sent.

The majority of the nurses returning the questionnaire were female. One hundred twenty (94 percent) of them were female while the remaining eight nurses were male (6 percent).

The age of the nurses surveyed ranged between twenty-one and sixty-one years of age. The majority (82 percent) of the nurses who returned the questionnaire were between the ages of thirty-one and sixty. Table 13 depicts the ages of the surveyed nurses.

The employment status of those surveyed varied somewhat. Eighty-nine (69 percent) were employed full time, thirty-five (28 percent) were employed part time, while the remaining four (3 percent) were retired or unemployed.

Table 13

Demographic Distribution of Nurses Surveyed on Second Questionnaire by Age

| Age Group | Nurses Surveyed No. | % |
|---|---|---|
| 21-30 | 17 | 13 |
| 31-40 | 47 | 37 |
| 41-50 | 30 | 24 |
| 51-60 | 27 | 21 |
| 61 or Older | 7 | 5 |

The length of time the surveyed nurses had been employed ranged from one year to fifty years. The majority (65 percent) of the nurses had been employed from one year to twenty years. Table 14 depicts the length of employment (in ten-year blocks) of all nurses surveyed.

There was also a variance in the type of agencies employing the surveyed nurses. Of those returning questionnaires, seventy-eight (61 percent) were employed by hospitals, seven (6 percent) were employed by the county or state, twenty-one (17 percent) were employed by a private office or agency (including self-employment), three (2 percent) were employed by a grade school/high school, twelve (10 percent) were employed by a college/university, two (2 percent) nurses were employed by the federal government and the remaining five (3 percent) were unemployed or did not

Table 14

Demographic Data of Nurses Surveyed on Second Questionnaire by Length of Employment

| Years of Employment | Nurses Surveyed No. | % |
|---|---|---|
| 1-10 | 42 | 33 |
| 11-20 | 41 | 32 |
| 21-30 | 26 | 20 |
| 31-40 | 17 | 13 |
| 41-50 | 2 | 2 |

give a response to this item. The types of agencies in which these nurses were employed is displayed in Table 15.

Table 15

Demographic Distribution of Nurses Surveyed on Second Questionnaire by Type of Employing Agencies

| Type of Agency | Nurses Surveyed No. | % |
|---|---|---|
| Hospital | 78 | 61 |
| College or University | 12 | 10 |
| Grade School/High school | 3 | 2 |
| County or State | 7 | 6 |
| Private office or Agency | 21 | 17 |
| Federal | 2 | 2 |
| Unemployed or no response | 5 | 3 |

The highest level of education (by degree) of the nurses answering the second questionnaire study was divided between nurses with an associate degree, a bachelor's degree, a master's degree, and a doctorate. Thirty-one (24 percent) nurses held an associate degree, twenty-eight (22 percent) held a diploma, forty-seven (37 percent) held a bachelor's degree, seventeen (13 percent) held an master's degree, and four (3 percent) held a doctorate. One nurse did not respond to this item. Some nurses had additional hours toward another degree and/or met requirements qualifying them for a special certification. Table 16 contains data on highest level of education (by degree) held by nurses returning the second questionnaire.

Table 16

Demographic Distribution of Nurses Surveyed on Second Questionnaire by Level of Education by Degree

| Certificate/Degree | Nurses Surveyed No. | % |
|---|---|---|
| Associate | 31 | 24 |
| Nursing Diploma | 28 | 22 |
| Bachelor's | 47 | 37 |
| Master's | 17 | 13 |
| Doctorate | 4 | 3 |

Note: Some nurses had additional hours toward another degree, and one nurse did not respond to this item.

Categorization of Responses on Second Questionnaire

The questions asked on the second questionnaire were written open-ended with a format similar to the first questionnaire. The questions were written in this format so the nurses would give their own perceptions instead of a forced response to predetermined options.

The questionnaire was organized around ten major areas of concern and/or strengths identified in the first questionnaire. The major areas were classified as: financial rewards, working conditions, autonomy, leadership/ administrative support, nurse-physician relationships, unity in nursing ranks, educational goals/programs, challenge/ advancement, value of nursing, and morale. In the questionnaire the respondents were asked to suggest specific strategies to make improvements in the identified areas.

Responses were tabulated and categorized according to commonalities which emerged. Following the placement of responses in appropriate categories, the Statistic Analysis System (SAS) program was used to determine frequency and percentage of responses. The following section of this report includes the responses grouped under categories for each question asked. The classification of each question (area of concern and/or strength) and the categories that emerged may be found in Appendix D.

Data from Second Questionnaire by Categories

When the respondents were asked what specific strategies they would suggest to provide greater financial

rewards for nurses, over half of the responses were under the category of provide incentives/benefits (30 percent) and increase nurses' base salaries (27 percent). Typical suggestions in these categories were:

> "Raise entry level salary for nurses."
>
> "Give year-end bonus or bonus for years of service."
>
> "Offer new graduates internship programs with full pay."
>
> "Include nurse in profit sharing."
>
> "Let nurse have flexibility to choose benefits to meet individual needs."

Another 19 percent of the responses had suggestions listed under the category increase salary for nurses' experience. Typical responses in this category were:

> "I believe pay raises should be commensurate with experience and learning of new skills."
>
> "Allow credit for prior experience when changing jobs."
>
> "Give merit increases for longevity."

The other suggestions for providing financial rewards for nurses fell under the categories of increase salaries for advanced degree/education (11 percent) and increase top salaries (10 percent). Four percent gave a variety of miscellaneous responses. Typical responses under these categories included:

> "Pay differential for higher education, i.e., BS or MS."
>
> "Salaries should not top out in five years; this does not occur in other professions."

"Nurses who attend courses to increase their job skills should be rewarded financially."

Table 17 contains the data on the categories of responses when the nurses were asked what strategies they would suggest to provide greater financial rewards for nurses.

Table 17

Responses by Categories on Strategies to Provide Greater Financial Rewards for Nurses

| Category | Responses Number | Percent of Total |
|---|---|---|
| Provide for incentives/benefits | 59 | 30 |
| Increase base salary | 53 | 27 |
| Increase salary for experience | 38 | 19 |
| Increase salary for advanced degree/education | 21 | 11 |
| Increase top salaries | 20 | 10 |
| Miscellaneous responses | 7 | 4 |

When the nurses were asked what suggestions they had to improve general working conditions to promote greater job satisfaction in the practice of nursing, the largest number of responses (37 percent) were in the category of flexibility and adequacy of staffing. Some typical responses were:

"Allow flexibility in staffing."

"Use variety of shifts: 8-hour, 10-hour, and 12-hour shift; four day work weeks; short shifts, such as 8 a.m. to 12 p.m. and 5 p.m. to 9 p.m."

"The need is for more staff trained for a particular unit, not pool nurses."

"Have sufficient staff, so nurses aren't overloaded with patients to the point that nurses can't give good care."

The next largest number of responses was in the category of relief from non-nursing responsibilities (22 percent). Typical responses in this area were:

"Keep nurses at bedside and delegate other responsibilities to other health care workers."

"Provide anciliary people to do menial tasks, i.e. housekeeping and transporting patients."

The other responses given fit under the categories of: Allow the nurse more autonomy for decision making (10 percent), offer support resources to nurses (8 percent), increase educational opportunities (7 percent), and peer-administrative support (7 percent). Nine percent of the responses were miscellaneous suggestions. Some typical responses under these categories were:

"Make use of special knowledge of nurses in consultation or in collaborative practice with other disciplines."

"Increase involvement by nurses in patient care decisions and recognize nurses for their skills and general compentency."

"Provide child care facilities."

"Offer good continuing education for nurses."

"Administration should support autonomy in their nurses."

Table 18 contains responses by categories on strategies to improve general working conditions to promote greater job satisfaction.

Table 18

Responses by Categories on Strategies to Improve General Working Conditions to Promote Greater Job Satisfaction

| Category | Responses Number | Responses Percent of Total |
|---|---|---|
| Flexibility and adequacy of Staffing | 67 | 37 |
| Relief from non-nursing responsibilities | 39 | 22 |
| More autonomy in decision making | 18 | 10 |
| Provide Support Resources | 15 | 8 |
| Increase educational opportunities, inservice, continuing education | 13 | 7 |
| Increase peer administrative support | 12 | 7 |
| Miscellaneous responses | 17 | 9 |

When respondents were asked what specific strategy they would suggest to promote greater autonomy for nurses in the work setting, almost half (49 percent) of the responses fell under the category of increase responsibility with accountability. Some typical responses were:

"Advancement of nursing orders."

"Foster nursing care alternatives, such as, shared governance, primary care, case management, and client/family relationships."

The next greatest number of responses fit under the category of provide an opportunity for decision making (28 percent). Typical responses were:

"Allow use of more standing orders that are nurse initiated depending on the patient, and allow nurses authority to carry out decisions relating to patients.".

"Have nurses serve on hospital committees with decision making power."

The remaining responses fit under the categories of administrative/peer support (15 percent) and miscellaneous responses (8 percent). Typical responses in these categories were:

"Use of support groups, such as, occupational interest groups to network with."

"Provide meetings with administration for problem solving."

Table 19 contains responses on strategies to promote greater autonomy for nurses in the work setting according to categories.

The third question on the questionnaire asked the respondents to suggest strategies which would provide more effective leadership and administrative support for nurses in the work setting. The most frequent responses were classified under the category of improve communication and increase involvement with the staff (41 percent). Typical responses included:

Table 19

Responses by Categories on Strategies to Provide Greater Autonomy for Nurses in the Work Setting

| Category | Responses Number | Responses Percent of Total |
|---|---|---|
| Increase responsibility with accountability | 67 | 49 |
| Provide opportunity for decision making | 38 | 28 |
| Administrative/peer support | 21 | 15 |
| Miscellaneous responses | 12 | 8 |

"Open lines of communication between staff and middle and top management. Have more staff meetings with administration to get staff nurse opinions, not just information sessions."

"Have written protocols on policies and procedures."

"Foster nurses' participation (not just supervisors) on committees at all levels in hospitals."

The other areas of responses were fairly evenly divided between the categories of administrative support/positive feedback (17 percent), better prepared administrators (15 percent), and provide management training for administrators (12 percent). There were 15 percent miscellaneous responses. Some of the typical responses under these categories were:

"More nurses with recent floor experience would benefit administration."

"Experience in profession should be a qualification for advancement to leadership roles."

"Require nurse managers/charge nurses to obtain education in leadership/management skills."

Table 20 contains data on responses on strategies to provide more effective leadership and administrative support for nurses.

Table 20

Responses by Categories on Strategies to Provide More Effective Leadership and Administrative Support for Nurses in the Work Setting

| Category | Responses Number | Percent of Total |
|---|---|---|
| Improve communication/ involvement with staff | 56 | 41 |
| Administrative support/ positive feedback | 24 | 17 |
| Better prepared administrators | 21 | 15 |
| Provide management training | 16 | 12 |
| Miscellaneous responses | 21 | 15 |

When the respondents were asked what strategies they could suggest to improve nurse/physician relationships, the most frequent responses were under the categories of sharing with the physician what the roles and responsibilities of the nurse are (27 percent), participation in joint committees/staff meetings (27 percent), and have agency promote collegial relationship (22 percent). There were

24 percent miscellaneous responses. The most typical responses in these categories were:

> "Orient new physicians/residents in the role of the nurse in the practice setting."
>
> "Have agency promote collegial relationships by arranging regular meetings between physicians and nurses."
>
> "Encourage nurse/physician consultation on patient care at regular intervals."
>
> "Communication is the key, encourage frequent short clinical conferences in the workplace."

Table 21 contains responses by categories on strategies to improve nurse/physician relationships.

Table 21

Responses by Categories on Strategies to Improve Nurse/Physician Relationships

| Category | Responses Number | Percent of Total |
|---|---|---|
| Sharing with physician the role and responsibilities of nurse | 37 | 27 |
| Participation in joint committee/staff meetings | 37 | 27 |
| Agency promote collegial relationships | 31 | 22 |
| Miscellaneous responses | 33 | 24 |

The next question the respondents were asked was what strategies could be used to establish greater unity within the ranks of nursing. The greatest number of

responses were under the categories of peer support at all levels (27 percent), encourage networking/communications (22 percent), and settle education issues (18 percent). Typical responses were:

> "In publications and meetings focus discussions more on shared strengths, viewing differences as complementary rather than opposing."
>
> "Actively support other nurses--assume they did things correctly, eliminate back-biting."
>
> "Use of preceptor programs are helpful in work setting."
>
> "Settle education issues once and for all."

The other responses fell under the category of involvement with professional organization (9 percent), unionize (7 percent), and miscellaneous responses (17 percent). Typical responses under these categories were:

> "Schools should encourage students to join professional organizations and employers should promote professional organizations by giving money incentives to those who belong and participate."
>
> "All nurses should join a union."

Table 22 contains data on responses by categories for strategies to establish greater unity within ranks of nursing.

The respondents were then asked for strategies or suggestions to improve nursing education programs and assist nurses in meeting their education goals. The greatest number of responses (34 percent) were under the category of receiving financial rewards or other incentives for increased education. Typical responses were:

Table 22

Responses by Categories on Strategies to Establish Greater Unity within Ranks of Nursing

| Category | Responses Number | Responses Percent of Total |
|---|---|---|
| Peer support at all levels | 34 | 27 |
| Encourage networking/ communication | 28 | 22 |
| Settle education issues | 23 | 18 |
| Involvement with professional organization | 11 | 9 |
| Unionize | 9 | 7 |
| Miscellaneous responses | 21 | 17 |

"Tuition reimbursement by employer for earned college credits."

"Have hospitals pay for all or half of registration for workshops and for seminars that nurses attend and give paid time off for educational classes and inservice programs."

The other responses were classified under the categories of provide quality programs (17 percent), alternative times for program offerings (13 percent), improved articulation between programs (11 percent), and miscellaneous responses (15 percent). Typical responses found in these categories were:

"Educational programs need to reevaluate courses to determine if they are meeting current needs."

"Promote articulation between programs. Have step-ladder educational programs for nurses to earn their degrees without overlapping and repeating."

"Offer course in the evenings and on weekends and have inservice programs on evening and night shifts."

Table 23 contains categories of responses on strategies to improve nursing educational programs and assist nurses in meeting their educational goals.

Table 23

Responses by Categories on Strategies to Improve Nursing Educational Programs and Assist Nurses in Meeting Their Educational Goals

| Category | Responses Number | Percent of Total |
|---|---|---|
| Provide financial rewards and incentives | 54 | 34 |
| Provide quality programs | 27 | 17 |
| Alternative time for program offerings | 21 | 13 |
| Improved articulation between programs | 18 | 11 |
| Miscellaneous responses | 39 | 15 |

The next question the nurses were asked was what suggestions they had for strategies which would offer nurses opportunity for greater career challenges and advancement. The two main categories that these responses were classified under were financial incentives (21 percent) and give advancement for clinical proficiency (20 percent). Typical responses for these categories were:

> "Increase salary commensurate with advancement on clinical ladder and treat those who advance special."
>
> "Pay incentives for those who become certified."

The other responses given to this question were classified under the categories of many opportunities presently available (12 percent), increase the number of educational programs/offerings (10 percent), and credentialing/certification (7 percent). In addition, there were a large number (24 percent) of miscellaneous responses. Typical responses given under the above categories were:

> "My hospital offers a chance for challenge and advancement."
>
> "The challenges are there if nurses are willing to invest the time."
>
> "Provide more training programs within the hospitals."
>
> "Acknowledge nurses who have become certified and financially reward nurses who take extra training and move to high tech areas."

Table 24 contains categories of responses on strategies that would offer nurses opportunity for greater career challenges and advancement.

When the nurses were asked to make suggestions on strategies to make the public more aware of the value of nursing as a profession, the majority of the responses were under the categories of use marketing approach (35 percent) and initiate means to create positive media publicity (24 percent). Typical responses under these categories were:

Table 24

Responses by Categories on Strategies Which Would Offer Nurses Opportunity for Greater Career Challenges and Advancement

| Category | Responses Number | Percent of Total |
|---|---|---|
| Provide Financial incentives | 26 | 21 |
| Advancement for clinical proficiency | 25 | 20 |
| Many opportunities presently available | 15 | 12 |
| Increase number of educational programs/offerings | 13 | 10 |
| Credentialing/certification | 9 | 7 |
| Miscellaneous responses | 30 | 24 |

"Use more of a marketing approach regarding nursing. Foster public education, promote career days, use TV ads and increase RN visibility at community events."

"Change the way television portrays nursing so the nurse is not always seen as being inept."

"Put on public education programs to show what nurses do, what kind of care we give, and decisions we make based on our own education and judgment."

Other responses given to this question were placed in the categories of improved nursing care and image of nursing (11 percent), professional organization should publicize (8 percent), and other miscellaneous responses (22 percent). Typical responses under these categories were:

"Have nurses present a favorable image of nursing, get the standard up financially and workwise, then public will become aware."

"Professional organization should hire a public relations person to publicize nursing."

"This will only happen when public gains a positive image of nursing giving good care."

Table 25 contains categories of responses on strategies to make the public more aware of the value of nursing as a profession.

Table 25

Responses by Categories on Strategies to Make the Public More Aware of the Value of the Nursing Profession

| Category | Responses Number | Percent of Total |
|---|---|---|
| Use marketing approach | 45 | 35 |
| Create positive media publicity | 31 | 24 |
| Improve nursing care and image of nursing | 14 | 11 |
| Professional organization should publicize | 11 | 8 |
| Miscellaneous responses | 29 | 22 |

When the nurses were asked for suggestions on strategies to increase morale of nurses and decrease burnout, the greater number of responses were given under the categories of peer/administrative support (24 percent) and better staffing patterns/increased staffing (23 percent). Typical responses were:

"Provide positive feedback to the staff on a regular basis and they will be less apt to feel burned out when staff is short, creating more difficult working conditions."

"Increase support of nurses within the ranks, foster more collegiality."

"Greater scheduling flexibility to create better staffing patterns and to meet needs of nurses."

Additional responses were under the categories of increase pay (16 percent), provide incentives (14 percent), increase autonomy (9 percent), and miscellaneous responses (15 percent). Typical responses under these categories were:

"Increase salaries, this is a big motivator."

"Increase benefits, especially health care benefits and child care."

"Let nurses have a say in administrative decisions and be allowed in management meetings."

"Defend nurses autonomy by allowing nurses to participate in more decision making."

Table 26 contains categories of responses on strategies to increase morale of nurses and decrease burnout.

## Summary

The results of this study were presented in two major sections that corresponded with the purposes described in Chapter 1. The first section contained data on the factors that nurse leaders, practicing nurses, and nurse educators in Arizona perceived to be: (1) reasons for the nursing shortage and decline in enrollment in nursing programs, (2) weaknesses in the nursing profession which

Table 26

Responses by Categories on Strategies to Increase Morale of Nurses and Decrease Burnout

| Category | Responses Number | Percent of Total |
|---|---|---|
| Peer/administrative support | 44 | 24 |
| Better staffing patterns/ increased staffing | 43 | 23 |
| Increase pay | 30 | 16 |
| Provide incentives | 26 | 14 |
| Increase autonomy | 16 | 9 |
| Miscellaneous responses | 28 | 15 |

have contributed to the shortage of nursing and decline in student enrollment and (3) strengths in the nursing profession that could attract candidates into nursing and retain them in the profession.

The second section contained strategies that could be implemented to attract more qualified students into nursing programs and retain them in the profession. This second section was built on the data base obtained in the first section. The next chapter will contain a detailed discussion of these results, conclusions reached, recommendations made and strategies for diffusion and implementation of findings.

# Chapter 5

## INTERPRETATION, CONCLUSIONS, AND RECOMMENDATIONS

The final chapter of this Major Applied Research Project contains interpretation of results and conclusions drawn from the study findings. Recommendations are then suggested for strategies which could be implemented to attract qualified candidates into nursing programs and retain them in the profession. The process for diffusion and implementation of the study findings is also described.

### Interpretation of Results

#### Interview and First Questionnaire

There was an overwhelming positive response from the nurses interviewed and the nurses returning questionnaires that a shortage of nurses existed in the county in which the nurse resided, in Arizona and in the USA. It was also the belief of the majority of the nurses that the media was fairly accurate in depicting the shortage of nursing. These findings indicate that the nurses were knowledgeable about the present nursing shortage.

Although the data from the interviews and the survey are reported separately, the degree of congruence of responses of the two groups was quite evident. Due to commonalities of responses, the responses were organized under the five following major categories: career and

self-development, image of nursing, professional practice, organization/administration, and miscellaneous. Further analysis of the data revealed that the responses from both groups could also be classified into common subcategories under each major category. For ease of presentation, only the subcategories will be discussed.

One of the subcategories that was most frequently mentioned as a cause for the nursing shortage by both the interviewed and surveyed nurses was the lack of adequate financial compensation for nurses. This finding confirmed that low salaries and inequality of nurses' salaries as compared to other professions was perceived to be a critical factor which had contributed to the nursing shortage, as was postulated by several authors writing about the nursing shortage (Engel, 1987; Tregarthen, 1987; and Gioiella, 1987).

Another leading factor identified by the interviewed and surveyed nurses as contributing to the nursing shortage is that other desirable career opportunities are more accessible for women, and women are choosing these careers instead of nursing. This finding agrees with Miller's (1987) focus group interviews study for the American Hospital Association in which it was noted that women had enhanced opportunities to enter formerly male-dominated fields. Also, in the UCLA study on career trends, it was found that women are making career choices in fields that used to be non-traditional careers for women (Tregarthen, 1987).

Still another significant finding that both the interviewed and surveyed nurses listed as a cause of the nursing shortage is the existence of poor general working conditions in nursing as compared to other professions. Typical examples of poor working conditions consisted of having to work undesirable hours, working with a shortage of personnel, and having to work under stressful situations. Although no studies were found in the literature substantiating poor working conditions as a reason for the nursing shortage, a variety of authors gave this as a rationale for young people not choosing nursing as a career and for nurses leaving the profession (Clark, 1987; Wooley, 1987; Lewin, 1987).

The negative image of nursing was another subcategory that was often mentioned by the respondents as a cause for the nursing shortage. The implication of nurses not being valued in our society and the poor image of nursing was also discussed in the literature by Lewin (1987), Oski (1987), and Rosenfeld (1987b) as being one of the many factors contributing to the nursing shortage.

The interviewed nurses' and surveyed nurses' perceptions on the reason for the decline in enrollment in nursing programs were closely aligned to the reasons given for the nursing shortage. Lack of financial compensation was the most frequent response given. According to the associate director of the Higher Education Institute at the University of California, women are beginning to choose

careers similar to the way that men do when it comes to money and material rewards (Engel, 1987). Gioiella (1987) also discusses the importance of wages as one of the reasons women do not choose nursing as a career.

The nurses interviewed and surveyed also believed there was a decline in enrollment in nursing programs due to other desirable career opportunities open for women and the negative value of nursing as a career choice. According to Wooley (1987), this poor image discourages those who might consider nursing as a career when they see in the media that nurses are leaving nursing due to low pay, high stress, and poor working conditions.

It is interesting to note that the greatest number of the nurses' responses fell in the same subcategories when they were asked to give their perceptions on the plausible causes of the nursing shortage and reasons for the decline in enrollment in nursing programs. Lack of adequate financial rewards ranked first as a cause for the nursing shortage and for the decline in enrollment, and women having more career choices, which they are choosing, ranked second as the cause of the nursing shortage and for the decline in enrollment in nursing programs.

When the interviewed nurses and surveyed nurses were asked to identify weaknesses within the profession that may have contributed to the nursing shortage, the greatest number of responses from both groups were classified under the subcategory of lack of unity within the profession. The

responses varied from "lack of unity among nurses themselves" to "nurses do not stand together and support each other nor do they give recognition to other nurses" to "disharmony and inability to coordinate efforts as to what our profession is and even what requirements we should have for educational preparation of nurses."

The next most frequent response given as a weakness in the profession contributing to the nursing shortage by the interviewed nurses was the negative value of nursing as a career choice, while the surveyed nurses responded it was lack of financial compensation. On prior questions asked about the cause of the nursing shortage and decline in enrollment in nursing programs, these same issues were identified as contributing to the shortage.

When the nurses were asked to look at strengths that could attract people to the nursing profession, the most frequent responses given by the interviewed nurses were somewhat different than those given by the surveyed nurses. The greatest number of responses on strengths of the profession given by the interviewed nurses fell under the subcategories of opportunity for advancement/challenge and opportunity to meet educational goals, while the surveyed nurses' most frequent responses fell under the subcategory of altruistic value of nursing. These responses were similar to some of the findings in the magnet hospitals study done in the early 1980s (McClure, 1983). In the magnet hospitals, emphasis was placed on career development

and education had a high priority. In this same study, there was a persistent strand that ran through comments the magnet hospital nurses made. These comments related to quality of care with discussion focusing on concern for the patient and how "able to practice nursing" gave nurses great satisfaction.

When the nurses were asked why some hospitals/ specialty groups were not experiencing a shortage of nurses, the most frequent responses for the nurses interviewed fell under the subcategories of good general working conditions, adequate financial rewards and job availability in area/ specialty. For the surveyed nurses, the most responses fell under the subcategories of adequate financial rewards, good working conditions, and positive support from administration. Most of these strengths were the same that were identified in the early 1980 magnet hospitals study (McClure 1983).

Second Questionnaire

The findings from the interviews and first questionnaire pointed to ten areas that directly related to the nursing shortage. These ten areas were either concerns the nurses had or areas of strengths that had a direct effect on the shortage of nurses and decline in enrollment in nursing programs. The ten identified areas were classified as: financial rewards, working conditions, autonomy, leadership/administrative support, nurse/physician relationships, unity in nursing ranks, educational

goals/programs, challenge/advancement, value of nursing, and morale. The second questionnaire asked the respondents to identify strategies which could be implemented to attract qualified candidates into the nursing profession and retain them in the profession under each classified area.

On the second questionnaire there was a 20 percent return with only 18 percent of the questionnaires having usable data. Filling out the second questionnaire required greater time and effort for those surveyed because it required a cognitive process of problem solving. This could have been a contributing factor for the low survey return.

Of the surveys returned, the greatest number of responses from the surveyed nurses regarding strategies to increase financial rewards were to provide benefits and incentives. There was almost the same number of responses suggesting that salaries at the entry level be increased. Many of the nurses also felt that nurses should be paid increased salaries for experience and education. In relation to this issue, the respondents believed that salaries should continue to rise instead of being topped off within a very few years of employment. The financial inequalities of nurses as compared to other professions has been described in the literature (Engel, 1987; Gioiella, 1987). According to statistics taken from the Bureau of Labor, nurses' earnings increase less over the course of their careers than most other workers. Experts give this as

a major reason people are reluctant to enter nursing ("Vital Signs," 1988).

The strategies that the surveyed nurses suggested to improve working conditions were mainly related to improving staffing by having more flexible staffing and by increasing the amount of staff. The nurses also gave a large number of responses under the category of providing relief from non-nursing responsibilities. The underlying message of these nurses seemed to be there is a nursing shortage and the shortage must be alleviated to improve working conditions. Many of the nurses believed that creative staffing patterns and hiring other persons to do non-nursing activities would do a great deal to improve working conditions.

The surveyed nurses also had suggestions for strategies to increase autonomy for nurses. The respondents suggested that nurses should have more responsibility with accountability and be allowed more freedom in decision making. Many of the respondents felt the way to do this was to use case management, shared governance, or in some way allow nurses some mechanism to make decisions that they felt qualified to make without first checking with someone else. Other respondents suggested the use of standing orders or letting the nurse initiate nursing orders. In the early 1980 magnet hospitals study done to determine what made hospitals attractive to nurses, it was found that participatory management was the general style of management, with the practicing nurses actively engaged in

decision at all levels in the magnet hospitals (McClure, et al., 1983).

The nurses who were surveyed suggested strategies to provide more effective leadership and administrative support. The most frequent responses given related to improving communication between the staff and supervisors. The respondents also suggested that nurse leaders/ supervisors have more involvement with the staff. Closely aligned to this issue was the suggestion that nurse leaders and administrators provide more positive feedback to staff nurses. Some of the respondents also felt that leaders/ administrators should be better prepared and some felt that management training should be provided for leadership positions. Nursing programs have limited management training skills included in the curriculum. In the past, very few women have been in high level hospital administrative positions and even fewer have had educational preparation along the lines of administration. One of the nurse leaders interviewed with a high level position stated she was required to learn most of her management skills on the job and it is a continual learning process.

The nurses also had suggestions for strategies for improving nurse/physician relationships. The greatest number of responses suggested that the physicians did not understand the present role of the nurse. The respondents suggested that there be a means to share with the physician the role and responsibility of the nurse. Another way to

make the physician more aware of the role of the nurse and to improve relations is to have the nurses and physicians participate in joint committee/staff meetings. It was suggested by the respondents that the agency could promote more of a collegial relationship by arranging these joint committee/staff meetings.

In order to increase unity within the ranks of nursing, the respondents suggested that nursing peers should provide greater support to each other at all levels. Similarly, it was believed that nurses should improve communication and network more. Many persons returning questionnaires felt that the educational entry level to nursing was an issue that was causing disharmony among nurses and it was suggested by many persons that the education issue should be solved once and for all. Entry level education has been discussed in nursing since 1968 and still the nursing profession is not in agreement on the type of college degree the nurse should have and if there should just be one entry level or several. The nurses' responses indicated they were tiring of the debate. This issue has been written about extensively over the years since the first proposal was initiated that would require the bachelor's of science as entry level for professional nursing.

Strategies were given by respondents to improve nursing educational programs and assist nurses in meeting their educational goals. The most frequent response fell

under the subcategory of providing financial rewards and incentives to nurses. It was suggested by the respondents that employers should help finance nurses' educational goals by paying tuition reimbursement and conference and workshop registration. The respondents also suggested that the hospitals should offer nurses more educational classes, conferences, and workshops. In order to improve educational programs, it was suggested by respondents that the quality of the classes should be improved and offered at times when the nurses could more easily attend. Another suggestion by respondents was that educational programs should be better articulated so nurses would not have to repeat information/ knowledge previously learned when attempting to earn a more advanced degree.

Financial incentives again came up as the most frequent reason for offering nurses opportunity for greater challenge and advancement. More specific suggestions were that nurses should be paid bonuses or increased salaries commensurate with advanced education and advancement on the clinical ladder. Respondents also suggested that nurses should receive bonuses or increased salaries for any type of certification received. Instead of suggesting strategies for career challenges, many nurses responded that the opportunities were already available for tremendous challenges and advancement in nursing.

When the nurses were asked to make suggestions on how to improve the image of nursing, the greatest number of

respondents suggested the use of an overall marketing approach by using several different means to let the public know what it is that nurses do and to promote and sell nursing. Some of the suggestions included making use of the media to get information out to the public. In regard to the media, many nurses felt that the present media image was poor and this image should be improved so that nurses are portrayed as intelligent, responsible people giving the kind of care that nurses believe they give. The respondents also felt that the variety of roles that nurses perform should be publicized. Some nurses felt the professional organization should become involved in publicizing what nurses do in a positive manner.

When surveyed nurses were asked to suggest strategies to increase nurses' morale and decrease burnout, the most frequent response that the nurses gave was to increase peer/administrative support. The next most frequent response was to have better staffing patterns and increase the number of staff. Many respondents suggested that nurses are burned out because they are overworked, understaffed, chronically tired and emotionally drained. The next most frequent response given as a strategy was to increase salaries and to provide incentives to make nurses feel more important. It was also suggested that giving nurses increased autonomy would also increase morale and decrease burnout.

The problem of the shortage seems to feed on its own problem. Nurses are shortstaffed, so they become tired. If they become excessively overworked, they become dissatisfied with their job and become burned out. If the burnout is long lasting, the nurse will quit his or her job and the situation worsens. If nurses are to be retained in nursing, solutions must be reached to reverse this process. To decrease burnout nurses can support nurses and administrators can offer their support when conditions seem bad for the nurses. In the group interviews held by the American Academy of Nursing, it was stressed that nurses need to know that they are valued by the health care system and hospitals must help satisfy that need for nurses (McClure, et al., 1983).

## Conclusions

Interpretation of data from the interviews, questionnaires and literature review revealed several major issues that the nurses identified as causes of the nursing shortage and decline in nursing school enrollments. The issue that was repeated most frequently in the interviews and on the questionnaire surveys related to the lack of adequate financial compensation for nurses. Not only was this reason frequently given as a cause for the shortage of nurses and decline in enrollment in nursing programs, it was also given as one of the weaknesses in the nursing profession and one of the reasons women are choosing other

career opportunities instead of nursing. The financial compensation issue is also addressed in the literature, with the greatest emphasis being placed on other professions offering women higher levels of compensation during their careers. In the literature it is implied that the beginning salaries of nurses are comparable to other professions; however, due to wage compression, career earnings in nursing fall short of most other professions. However, the nurses surveyed believed that both entry level salaries and career salaries were low for nurses. Although the respondents did not suggest strategies to accomplish the means for nurses to obtain higher salaries, it was their belief that entry level salaries should be increased and interim salaries should be granted throughout a nurse's career as he or she gains further education and experience. The responding nurses believed that if greater financial incentives and rewards were offered to nurses, more people would choose nursing as a career and stay in the profession.

Another relating issue that emerged from this study was that women now have many more career choices than they had in the past and they are choosing these options instead of nursing. This creates the potential for a huge manpower shortage because most nurses are women and these women are looking for careers in areas that are seen as financially rewarding, exciting, challenging, and admired by society. The surveyed nurses were aware of this situation; however, many of the respondents believed that nursing was a

rewarding career which offered many challenges and opportunities for nurses. Other respondents believed that not only was nursing a satisfying career, but it granted the opportunity for a person to have steady employment with adequate compensation.

The poor image of nursing was another emerging issue that compounded the reasons for students not choosing nursing as a career and for practicing nurses leaving the profession. The respondents believed that the public views nursing as a career encompassing poor general working conditions due to difficult work under stressful situations, undesirable hours, and poor pay. The respondents also believed this image is further tarnished by the way the media depicts nurses. One respondent commented that when a nurse is seen on television she is seen as a bimbo without a functioning brain who is more interested in doctors than in nursing. There seemed to be general agreement by the respondents that the media rarely reflects nursing accurately or in a positive manner. Strategies given by respondents to counter this negative image were to develop a marketing approach to recruit, promote, and sell nursing as a viable career choice. The respondents felt the media should depict nurses accurately and as intelligent, responsible people giving good nursing care. Some respondents also suggested that the profession should publicize that persons choosing nursing as a career have a variety of roles to choose from with innumerable

opportunities for advancement and challenge if a person is willing to put forth the effort.

The surveyed nurses perceived that not only did the public view nurses as having poor general working conditions, but they themselves had this same belief. Some of the strategies suggested to improve working conditions consisted of providing nurses relief from non-nursing duties and responsibilities. Respondents believed that having ancillary personnel available to do non-nursing functions would greatly contribute to improving working conditions. Similarly, the respondents felt working conditions would improve if there were more nurses available to provide nursing care. Some respondents believed more creative staffing patterns would help alleviate the shortage of nurses and that, if staffing patterns were more appropriate, an adequate amount of help would more likely be available at the time of greatest need. Many of the interviewed and surveyed nurses also felt that the working conditions of nurses would be improved if nurses had more autonomy for decision making. The strategies suggested for providing more autonomy included making drastic changes in the way care is delivered in most hospitals. Some respondents suggested that primary care nursing or some type of shared governance would be the best means to deliver nursing care and give nurses more autonomy and, thus, more job satisfaction.

Still another contributing factor that the surveyed nurses identified as one of the reasons for the shortage of nurses and decline in enrollment in nursing programs is the disharmony within the profession and lack of unity within the ranks of nursing. The respondents felt this occurred at all levels of nursing as demonstrated by nursing leadership not being able to define what our profession is or agree on the educational preparation for entry level into the work force. Some respondents expressed concern that the professional organization did not adequately represent working nurses. Many respondents felt practicing nurses did not support each other in the work setting. Strategies given to improve unity in the ranks were simply for nurses to give each other support and for administration to support nurses. The respondents believed another key concept for increased unity was improving communication through networking. There were also a few respondents that believed that the professional organization must become stronger so that it can make more appropriate and better informed decisions based on the needs of the majority of nurses.

When the nurses were asked to give strengths of the nursing profession that could attract people to nursing, many respondents stated that being a nurse and helping others was very self-satisfying. Other respondents felt that there were opportunities for challenge and opportunities to meet educational goals. Respondents

believed that employing agencies should help finance the nurses' educational goals by paying tuition reimbursement and conference and workshop registration fees. It was also the respondents' belief that there should be improved articulation between nursing programs and that program offerings should be made at a time convenient for working nurses.

The foregoing conclusions are based on the findings from the literature review, interviews, and the two survey questionnaires. The next section of this report contains recommendations that were drawn from results of this study.

## Recommendations for the Improvement of Practice, Including Strategies for Diffusion, Implementation, and Improvement

Hospitals and health care delivery systems must be made aware of the way nurses feel about their low salaries and how career earnings must be increased to attract high quality candidates into nursing and keep them in the profession. Although college and university nursing programs can't directly impact the level of financial compensation for practicing nurses, they can continually make employers aware of the importance of having financial compensation equitable to the responsibilities carried out by the nurse in the hospital. Faculty members as individuals, can serve on committees in professional organizations and on task forces or get appointed to the State Board of Nursing so they can impact financial

decisions regarding nursing. Faculty members can also keep abreast of political issues regarding nursing legislation that may affect nurses' salaries and pass this information on to students so the students become more politically active. Still another way that nursing faculty can make hospitals aware of how nurses feel about the issue of low salary is for them to attend hospital meetings whenever possible and network with nurses in leadership positions in clinical agencies.

The respondents in this study felt staffing and the shortage of nurses itself was one factor that contributed to poor working conditions. College and university nursing programs can assist in alleviating this problem by recruiting qualified students into the program so they can graduate and become registered nurses. Nursing programs can also encourage students to take classes in management, leadership, and assertiveness training so they can be effective in creating change in the way decisions are made and the way nursing care is delivered once they become registered nurses. Programs of nursing can also help increase nursing staff by recruiting registered nurses that have dropped out of nursing. Phoenix College presently offers a modular refresher course for registered nurses. Increased advertisement for this refresher course could make more nurses who are not working aware of this means to re-enter the workforce.

Survey respondents indicated that they would be more likely to attend classes and courses if they were compensated adequately and if qualify programs/courses were offered at a time when the nurse did not have to work. Although nursing programs can't resolve the financial issue, they can survey hospital nurses to determine the types of programs nurses need and the most appropriate times to offer classes.

Study respondents also stressed the importance of establishing an entire marketing approach to recruit potential candidates into nursing programs. In addition to attending high school career days, nursing programs could serve as a focal point for the collection and dissemination of information about nursing, including some of the innovative new specialized areas in which nurses are beginning to work.

Many respondents stated that there are innumerable opportunities for advancement and challenge in nursing and there are many ways to meet established educational goals. By using a marketing approach, nursing programs can become very involved in making potential candidates for the nursing programs aware of the career opportunities that are available to them in nursing and some of the positive aspects of a nursing career.

Nursing programs can also promote a positive and accurate image of the nurse by having nursing faculty members talk to prospective students to describe

the many facets available to them should they choose a career in nursing. Nursing faculty could provide this information to students in high schools and community colleges. Faculty members can also become involved in initiating a panel to lobby television and media sources to make changes in the way that nursing is portrayed to the public. If nurses were portrayed in a more positive manner, prospective students would be more likely to choose nursing as a career option.

Recommendations:

The following recommendations are made based on study findings and insights derived from this study.

1. Nursing faculty members should serve on committees in professional organizations, on task forces, and on the State Board of Nursing to impact decisions that affect nurses' salaries.
2. Nursing faculty members should keep abreast of political issues that impact nurses and, as issues come up, network with other nurses and students to affect appropriate decisions regarding nursing.
3. The Phoenix College nursing program should investigate and implement innovative marketing strategies and techniques for student recruitment.
4. The Phoenix College nursing program should determine when high schools are holding career

days and have nursing faculty attend these events to represent nursing.

5. Student nurses should be encouraged to take courses in leadership, management, and assertiveness training skills as elective courses.
6. The Phoenix College nursing program should investigate areas of nursing interest in continuing education and then develop and conduct continuing education courses according to local need.
7. A panel of nurse leaders and educators from the community colleges and universities should be established to lobby television and other media sources to portray nursing in a more positive manner.

Diffusion:

Diffusion of some of the study results was instigated while research was still ongoing. The entire process for diffusion of the results and recommendations of this study consist of the following steps:

1. The results of the survey were mailed to the respondents of questionnaire one who requested this information.
2. The results of both the first questionnaire survey and the interview were mailed to all nurse

leaders, nurse educators, and practicing nurses who were interviewed.

3. A summary of study findings will be mailed to respondents of questionnaire two who request it and to all nursing programs in Maricopa County (Arizona).
4. Study results will be presented to Phoenix College nursing faculty and to other professional nursing groups through workshops and conferences.
5. Plans have been initiated to publish the study findings in a nursing or research journal. Letters of inquiry have been sent to several nursing publications.
6. A copy of the approved Major Applied Research Project will be forwarded to the National Educational Resources Information Center (ERIC) for possible inclusion in the ERIC system.

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# APPENDIX A

4702 West Via Cynthia
Glendale, AZ 85301

December 8, 1988

I am a nursing faculty member at Phoenix College and also enrolled in the Doctorate of Education program at Nova University. As a candidate of this program, I am doing a study on the shortage of nurses and the decline in enrollment in nursing programs. Although much has been written regarding these nursing issues, no one has published information taken from a large sample of nurses regarding their beliefs as to the reasons for the nursing shortage and the decline in student enrollment.

I am collecting data from a large sample of nurses in Arizona related to their perceptions on the nursing shortage and decline in nursing student enrollment. Based on these data, I plan to identify strategies that could be used to increase student nurse enrollment and retain nurses within the profession.

Your help is needed to collect these data. I would greatly appreciate it if you would take 15 to 20 minutes to complete the enclosed questionnaire and return it in the postage-applied envelope. The information in this study will only be reported as group data and your name should not appear on the questionnaire.

Thank you for taking time out of your busy schedule to help me in this endeavor. If you would like to obtain the results of the study, please fill out and return the attached slip at the bottom of this letter. This slip will be separated from the questionnaire prior to looking at the questionnaire and tabulation of data.

Sincerely,

A. Louise Jones, RN, MS

Send results to:

---

NAME: _____

ADDRESS: _____

CITY, STATE, ZIP: _____

# Survey of Registered Nurses

## Section 1

Please fill out the following information in Section 1 as it applies to you and your present job.

Age: 20 or under _____, 21-30 _____, 31-40 _____
41-50 _____, 51-60 _____, 61 or older _____
Gender: Male _____, Female _____
Number of years as a nurse: _____
Are you employed: Full time _____, Part time _____
Type of employing agency: _____
Highest level of education you completed: _____

## Section 2

Please fill out Section 2 regarding your perceptions and ideas on the shortage of nurses and decline in enrollment in nursing programs. Please answer each question. Be as specific as possible.

Do you believe there is a shortage of nurses:

| | Yes | No |
|---|---|---|
| in the county where you reside | _____ | _____ |
| in Arizona | _____ | _____ |
| in the United States | _____ | _____ |

A shortage of nurses has been documented in some areas of nursing. Identify three major reasons why you believe this shortage has occurred.

1. _____

_____

2. _____

_____

3. _____

_____

It has been reported by a few hospitals and nursing specialty groups that they are not experiencing a nursing shortage. Why do you think these hospitals and specialty groups do not have a shortage of nurses?

_____

_____

_____

Recently, there has been increased media attention on the shortage of nurses. How accurate do you think the media is in reporting this situation?

Some schools of nursing have reported a decline in the number of students applying for the nursing program. Why do you believe this is occurring?

What are the weaknesses you see in the nursing profession and the practice of nursing that have contributed to the shortage of nurses and decline in enrollment in programs of nursing?

What are the strengths you see in the nursing profession and the practice of nursing that could attract people to nursing?

# APPENDIX B

A. Louise Jones
4702 W. Via Cynthia
Glendale, AZ 85301

July 8, 1988

I am a nursing faculty member at Phoenix College and also enrolled in the Doctorate of Education program at Nova University. As a candidate of this program, I am doing a study on the shortage of nurses and the decline in enrollment in nursing programs. Although much has been written regarding these nursing issues, no one has collected data on the plausible reasons for the nursing shortage and the decline in student enrollment.

I am presently collecting data from nurses in Arizona related to their perceptions on the nursing shortage and decline in nursing student enrollment. These data will be used to identify strategies that could be used to increase student nurse enrollment and retain nurses within the profession.

Your help is needed to collect these data. I would greatly appreciate it if you would take 15 to 20 minutes to complete the enclosed questionnaire and return it in the postage applied envelope. The information in this study will only be reported as group data and your name should not appear on the questionnaire.

Thank you for taking time out of your busy schedule to help me in this endeavor. If you would like to obtain the results of this study, please fill out and return the attached slip at the bottom of this letter. This slip will be separated from the questionnaire prior to looking at the questionnaire and tabulation of data.

Sincerely,

A. Louise Jones, R.N., M.S.

Send results to:

---

NAME: _____
ADDRESS: _____
CITY, STATE, ZIP: _____

## Survey To Identify Strategies

Section 1

Please fill out the following information in Section 1 as it applies to you and your present job.

Age: 20 or under _____, 21-30 _____, 31-40 _____
41-50 _____, 51-60 _____, 61 or older _____
Gender: Male _____, Female _____
Number of years as a nurse: _____
Are you employed: Full time _____, Part time _____
Type of employing agency: _____
Highest level of education you completed: _____

Section 2

Please fill out Section 2 regarding your ideas on strategies that you would propose to attract qualified students into nursing and retain them in the profession.

WHAT SPECIFIC STRATEGY WOULD YOU SUGGEST FOR THE FOLLOWING:

1. Provide greater financial rewards for nurses.

_____

_____

_____

_____

2. Improve general working conditions to promote greater job satisfaction in the practice of nursing.

_____

_____

_____

_____

3. Promote greater autonomy for nurses in the work setting.

_____

_____

_____

_____

4. Provide more effective leadership and administrative support for nurses in the work setting.

_____

_____

_____

_____

WHAT SPECIFIC STRATEGY WOULD YOU SUGGEST FOR THE FOLLOWING:

5. Improve nurse/physician relationships.

6. Establish greater unity within the ranks of nursing.

7. Improve nursing educational programs and assist nurses in meeting their educational goals.

8. Offer nurses opportunity for greater career challenges and advancement.

9. Make the public more aware of the value of nursing as a profession.

10. Increase morale of nurses and decrease burnout.

# APPENDIX C

CATEGORIES FOR FIRST QUESTIONNAIRE

Career and Self-Development

1. Educational goals (Opportunity to meet educational goals)
2. Personal needs
   a. Ability to meet personal needs
   b. Altruistic value of nursing
3. Career opportunities (Other desirable career opportunities open for women)
4. Advancement/challenge (Opportunity for advancement and challenge)

Image of Nursing

1. Value
   a. Positive value of the nurse
   b. Negative value of nursing as a career choice
2. Nursing education/educational programs
   a. Educational programs not adequate to meet needs
   b. Nursing education programs not attractive
3. Morale/burnout (Poor morale leading to burnout)

Professional Practice

1. Financial
   a. Offer adequate financial rewards
   b. Lack of adequate financial compensation
2. Autonomy
   a. Autonomy promoted for nurses
   b. Lack of autonomy for nurses
3. Nurse/physician relationship (Poor nurse/physician relationship.
4. Unity
   a. Unity within ranks of nursing
   b. Lack of unity within ranks of nursing

Organization/Administration

1. Leadership (Lack of leadership)
2. Administrative support
   a. Positive administrative support
   b. Lack of support from administration
3. General working conditions
   a. Good general working conditions
   b. Poor general working conditions

Miscellaneous

1. Job availability
   a. Job availability in area/specialty
   b. Stability of knowing jobs are available
2. Don't know/unsure/no answer
3. Other

# APPENDIX D

CATEGORIES ON SECOND QUESTIONNAIRE

Strategies to Provide Greater Financial Reward for Nurses

1. Increase salaries for advanced degree/education
2. Increase salaries for experience
3. Incentives/compensation/benefits
4. Increase base salary
5. Increase top salary
6. Miscellaneous responses

Strategies to Improve Working Conditions

1. Flexibility and adequacy of staffing
2. Relief from non-nursing responsibilities
3. More autonomy for decision making
4. Provide support resources
5. Educational opportunities/inservice/continuing education
6. Increase peer/administrative support
7. Miscellaneous responses

Strategies to Promote Greater Autonomy for Nurses

1. Increase responsibility with accountability
2. Provide opportunity for decision making
3. Administrative/peer support
4. Miscellaneous responses

Strategies to Provide More Effective Leadership/Administrative Support

1. Improve communication/involvement with staff
2. Administrative support/positive feedback
3. Better prepared administrators
4. Provide management training
5. Miscellaneous responses

Strategies to Improve Nurse/Physician Relationship

1. Sharing with physician the role and responsibilities of the nurse
2. Participation of joint committee/staff meetings
3. Agency promote collegial relationship
4. Miscellaneous responses

Strategies to Establish Greater Unity in Ranks

1. Peer support at all levels
2. Encourage networking/communication
3. Settle education issues
4. Involvement with professional organization
5. Unionize
6. Miscellaneous responses

CATEGORIES ON SECOND QUESTIONNAIRE (Cont'd)

Strategies to Improve Nursing Educational Programs and Assist Nurses to Meet Educational Goals

1. Provide financial rewards and incentives
2. Provide quality programs
3. Alternative time for program offerings
4. Improved articulation between programs
5. Miscellaneous responses

Strategies for Increased Challenge/Advancement of the Nurse

1. Provide financial incentive
2. Advancement for clinical proficiency
3. Many opportunities presently available
4. Increase educational programs/offerings
5. Credentialing/certification
6. Miscellaneous responses

Strategies to Make Public More Aware of Value of Nursing

1. Use marketing approach
2. Provide positive media publicity
3. Improve nursing care/image of nursing
4. Professional organization should publicize
5. Miscellaneous responses

Strategies to Increase Morale of Nurses and Decrease Burnout

1. Peer/administrative support
2. Better staffing patterns/increased staffing
3. Increased pay
4. Provide incentives
5. Increase autonomy
6. Miscellaneous responses

# BIOGRAPHICAL SKETCH

BIOGRAPHICAL SKETCH OF A. LOUISE JONES

A. Louise Jones was born July 23, 1931 in Matteson, Illinois, the daughter of Luella and Walter Jones. She received her basic education in Illinois and earned a diploma in nursing at St. Luke's Hospital of Nursing in Chicago. In 1953 she began her career in nursing at St. Anthony's Hospital in Chicago. She moved to Seattle and worked in a number of hospitals and attended the University of Washington where she received a Bachelor of Science degree in 1962. She then worked in hospitals in Denver, Tucson, and Phoenix in the capacity of staff nurse, head nurse, and supervisor.

In 1969 she accepted a teaching position at Arizona State University. The subsequent year she entered the master's degree program in nursing at Arizona State University. After graduation in 1971, she accepted a full-time teaching position in the Maricopa County Community College District. During that tenure she taught at Phoenix College in several clinical specialties. She wrote, was awarded and directed a Health, Education, and Welfare grant for a multi-media learning laboratory in the nursing department. She also served as department chairperson at Phoenix College for three years and has served as a site visitor for program accreditation for the National League for Nursing. She is presently teaching in the clinical area of obstetrical nursing at Phoenix College.

I certify that I have read and am willing to sponsor this Major Applied Research Project submitted by A. Louise Jones. In my opinion it conforms to acceptable standards and is fully adequate in scope and quality as a Major Applied Research Project for the degree of Doctor of Education at Nova University.

1 May 1989
(date)

B R Herrscher
Barton R. Herrscher, Ed.D.
MARP Advisor

I certify that I have read this Major Applied Research Project and in my opinion it conforms to acceptable standards for a Major Applied Research Project for the degree of Doctor of Education at Nova University.

MAY 5, 1989
(date)

John R. West
John R. West, Ed.D.
Local Committee Member

This Major Applied Research Project was submitted to the Central Staff of the Programs for Higher Education of Nova University and is acceptable as partial fulfillment of the requirements for the degree of Doctor of Education.

May 22, 1989
(date)

Peter K. Mills
Peter K. Mills, Ed.D.
Central Staff Committee Member